



This is a digital copy of a book that was preserved for generations on library shelves before it was carefully scanned by Google as part of a project to make the world's books discoverable online.

It has survived long enough for the copyright to expire and the book to enter the public domain. A public domain book is one that was never subject to copyright or whose legal copyright term has expired. Whether a book is in the public domain may vary country to country. Public domain books are our gateways to the past, representing a wealth of history, culture and knowledge that's often difficult to discover.

Marks, notations and other marginalia present in the original volume will appear in this file - a reminder of this book's long journey from the publisher to a library and finally to you.

Usage guidelines

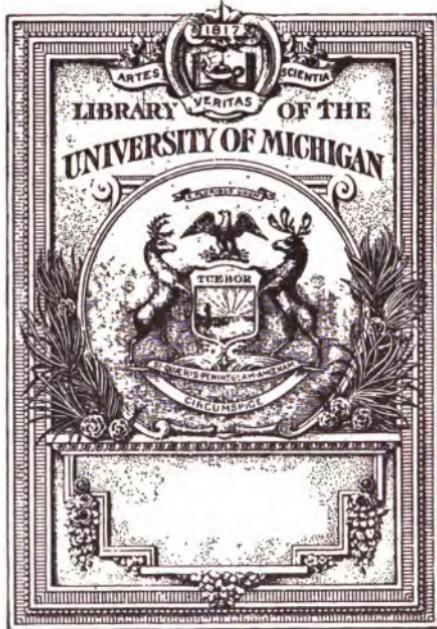
Google is proud to partner with libraries to digitize public domain materials and make them widely accessible. Public domain books belong to the public and we are merely their custodians. Nevertheless, this work is expensive, so in order to keep providing this resource, we have taken steps to prevent abuse by commercial parties, including placing technical restrictions on automated querying.

We also ask that you:

- + *Make non-commercial use of the files* We designed Google Book Search for use by individuals, and we request that you use these files for personal, non-commercial purposes.
- + *Refrain from automated querying* Do not send automated queries of any sort to Google's system: If you are conducting research on machine translation, optical character recognition or other areas where access to a large amount of text is helpful, please contact us. We encourage the use of public domain materials for these purposes and may be able to help.
- + *Maintain attribution* The Google "watermark" you see on each file is essential for informing people about this project and helping them find additional materials through Google Book Search. Please do not remove it.
- + *Keep it legal* Whatever your use, remember that you are responsible for ensuring that what you are doing is legal. Do not assume that just because we believe a book is in the public domain for users in the United States, that the work is also in the public domain for users in other countries. Whether a book is still in copyright varies from country to country, and we can't offer guidance on whether any specific use of any specific book is allowed. Please do not assume that a book's appearance in Google Book Search means it can be used in any manner anywhere in the world. Copyright infringement liability can be quite severe.

About Google Book Search

Google's mission is to organize the world's information and to make it universally accessible and useful. Google Book Search helps readers discover the world's books while helping authors and publishers reach new audiences. You can search through the full text of this book on the web at <http://books.google.com/>



THE GIFT OF
Dr. Emory W. Sink

INDUSTRIAL NURSING

FOR INDUSTRIAL, PUBLIC HEALTH, AND PUPIL
NURSES, AND FOR EMPLOYERS OF LABOR

BY

FLORENCE SWIFT WRIGHT, R. N.

CHAIRMAN OF THE INDUSTRIAL NURSING SECTION
OF THE NATIONAL ORGANIZATION FOR
PUBLIC HEALTH NURSING

New York
THE MACMILLAN COMPANY
1920

All rights reserved

Public Health

R.C.
7-6
1875

COPYRIGHT, 1919
By THE MACMILLAN COMPANY
Set up and electrotyped. Published July, 1919

Public Health
Self
H. E. Mary, St. Louis.
10-25-63

EDITOR'S PREFACE

The development of Public Health Nursing in the United States has naturally created a demand for literature. Not only must material be available for the hospital training schools and the rapidly developing post-graduate courses in Public Health Nursing, but also for the nurses throughout the country who are realizing that to read is as necessary in the nursing profession as in the medical profession, already rich in literature. The general public too is beginning to feel an increasingly intelligent interest in this form of health work. To meet these needs, it is proposed to publish a series of books dealing with the various aspects of Public Health Nursing. The authors selected will be recognized authorities and each subject will be so treated as to bring out the underlying principles and broad possibilities of development, and also the practical working details, which together will make the books of value to nurses.

Each volume will be complete in itself, but it is hoped that, through careful editing, duplication and omission will be avoided and that the series as a whole will make possible a comprehensive study of the entire field of Public Health Nursing.

MARY SEWALL GARDNER.

FOREWORD

To the preparation of this manual many industrial nurses have given freely from their experience and thought.

It is recognized that each plant and each industry is a separate problem requiring an elastic and flexible nursing service. It is not too much to expect, however, that there will be ultimate standardization of certain necessary methods, records, equipment, restrictions, etc., which will mean greater efficiency and safety.

Any standards worked out at the present time (1919) will doubtless require modification in the days to come in order to meet future industrial and social developments.

The writer hopes to present to pupil nurses, and to others who wish to take up industrial nursing, an idea of the conditions under which they may have to work and to emphasize the need of as thorough a training as possible. To those who, because the need is urgent must enter the field with little more preparation than a hospital training, this volume may serve as a guide to careful self-preparation while engaged in the work. It may also give to some employer, who still doubts the value of the trained nurse in industry, an idea of what the nurse can do for his organization, employés and community.

Because the work of the industrial nurse is so varied, because she is working in so many different industries, and because in no two places are her duties and responsibilities the same, it is very difficult to write about her work in a general way. Nurses are successfully employed in most large and in many small industries; in mills, factories, hotels, department stores, laundries and tanneries, in mining villages and other industrial communities, by insurance companies, banks and trust companies.

FOREWORD

They are doing first aid work, sanitary inspection, accident prevention work; they are working at employment problems, supervising lunch rooms and rest rooms; they are teaching first aid, hygiene, home nursing, child care, English.

As industrial visiting nurses, they are caring for the sick in their homes, teaching in these homes the care of children and elementary nursing principles; helping in the making of Americans from our masses of foreigners. They are doing the work of public health nursing in communities where, without them, little would be done for the prevention of sickness.

As agents of their employers, they are sometimes acting as health officers, tenement inspectors, recreation managers, and school nurses.

The nurse may be employed by various persons; an employer of labor, an organization of employers of labor with their workers, an employés' benefit association or a labor union. The term employer in relation to the nurse will be used as meaning the person or organization who has engaged her, who pays her and to whom she holds herself responsible for the proper performance of her duties and for the welfare of her patients. It seems wise to devote the most attention to the nurse in the small plant whose duties have frequently a wide range and who is often working alone except for the assistance of the company doctor. As the larger number of industrial nurses are probably employed in manufacturing plants, the nomenclature of such concerns will be used.

The principles of industrial nursing, however, apply equally to all branches. In a factory the nurse deals with owners, general manager, heads of departments, foremen, machine hands, etc. In a department store she deals with owners, general manager, floor managers, buyers, salespeople, etc.

For information, assistance and advice in the preparation of this manual, the writer is indebted to many who have been generous of time and thought; among them being: Miss Ella Phillips Crandall, Executive Secretary of the National Organization for Public Health Nursing; Miss Mary S. Gardner, Director of the American Red Cross Public Health

FOREWORD

vii

Nursing Service; Mrs. Bessie Amerman Haasis, Educational Secretary of the National Organization for Public Health Nursing; Mrs. Claribel Hill for assistance in gathering material for the records of the nurse in the employment office; Miss Frances Young, Librarian, National Organization for Public Health Nursing for assistance in the preparation of the bibliography; and Miss Ada M. Carr, former Head of the Educational Department of the Boston Instructive Visiting Nurse Association, for valuable assistance in the preparation of the manuscript, in the reading of the proof and for much wise counsel.



CONTENTS

	PAGE
CHAPTER I A BRIEF ACCOUNT OF THE DEVELOPMENT OF INDUSTRIAL NURSING	1
CHAPTER II THE QUALIFICATIONS AND TRAINING OF THE INDUSTRIAL NURSE	9
CHAPTER III ELEMENTARY PRINCIPLES OF INDUSTRIAL NURSING	14
CHAPTER IV THE INDUSTRIAL NURSE AND HER FELLOW WORKERS	18
CHAPTER V THE INDUSTRIAL NURSE AND THE COMMUNITY	28
CHAPTER VI THE FIRST AID ROOM NURSE	32
CHAPTER VII THE FIRST AID ROOM	51
CHAPTER VIII THE VISITING NURSE IN INDUSTRY	70
CHAPTER IX THE DAY'S WORK	81
CHAPTER X RECORDS AND REPORTS FOR THE FIRST AID ROOM AND FOR THE VISITING NURSE	90

CONTENTS

CHAPTER XI

THE INDUSTRIAL NURSE AND THE EMPLOYMENT OFFICE. RECORDS	PAGE
	99

CHAPTER XII

THE INDUSTRIAL NURSING CENTER.....	124
------------------------------------	-----

CHAPTER XIII

FOOD. THE COMPANY LUNCH ROOM.....	142
-----------------------------------	-----

CHAPTER XIV

A FEW QUESTIONS WHICH MAINLY CONCERN THE INDUSTRIAL NURSE HERSELF.....	150
---------------------------------------------------------------------------	-----

CHAPTER XV

WHAT INDUSTRIAL NURSING OFFERS TO THE NURSE.....	156
--------------------------------------------------	-----

APPENDIX

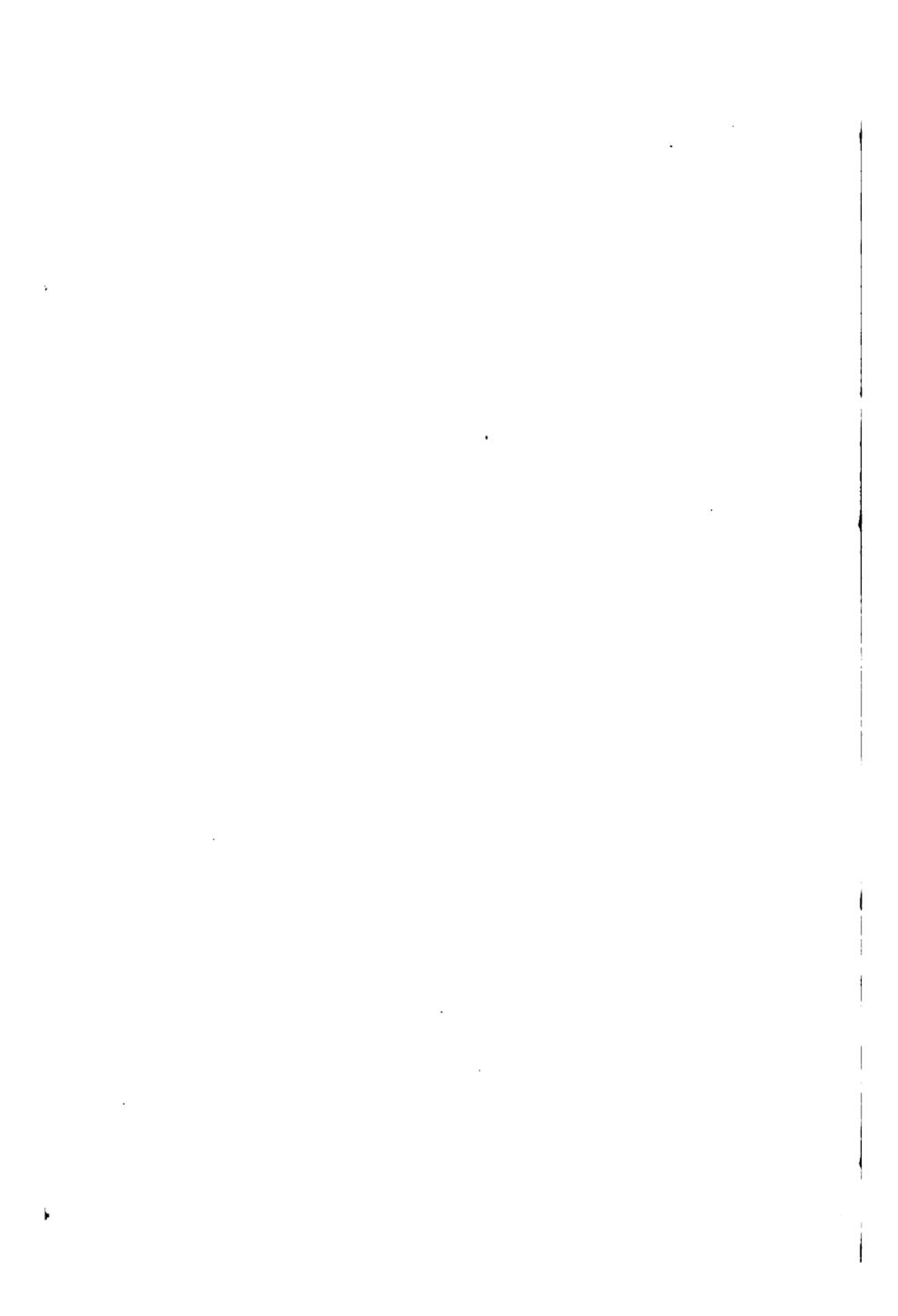
FIRST AID RULES.....	159
----------------------	-----

SOURCES OF INFORMATION ON PUBLIC HEALTH SUBJECTS.....	165
-------------------------------------------------------	-----

BIBLIOGRAPHY.....	169
-------------------	-----

INDEX.....	175
------------	-----

INDUSTRIAL NURSING



INDUSTRIAL NURSING

CHAPTER I

BRIEF ACCOUNT OF THE DEVELOPMENT OF INDUSTRIAL NURSING

About the middle of the last century we see the employer waking to a sense of responsibility for the welfare of his workers. In 1842 Dickens described what was probably one of the first industrial hospitals in the United States¹ and in 1852 an English employer² issued a report of "The Educational, Religious and Moral Charge to be taken by the Company over the Persons (and especially the young persons) in its Employment." Many early efforts for industrial welfare were of such a paternal nature as would be scorned by the average employé of this generation.³

The Pullman strike in 1894 is often quoted as a strong argument against industrial welfare efforts. The Pullman plan was instituted in 1880. There was no provision for a nursing service. Although excellent, and acceptable in many ways to self-respecting workers, its failure seems to have been due to a paternalistic attitude on the part of the employer. The effort to force the purchase of supplies at the company store and dictation as to the personal habits of the workers was probably the direct cause of discontent.

¹ "American Notes", by Charles Dickens, Chapter IV.

² Price's Patent Candle Company, Report 1852. New York Public Library.

³ For a brief account of the first practical utilization of the trained visiting nurse for the care of the sick in their homes (William Rathbone in Liverpool, 1859, and the Woman's Branch of the New York City Mission, 1877) see "Visiting Nursing in the United States," Yasabella Waters.

It is even said that the workers were not permitted to sit on their doorsteps in their shirt sleeves.¹

Since 1842 we have traveled fast and far and bid fair to go at a still more rapid pace for some time to come.

All through the history of industry we see the employer (or more frequently his wife or maiden sister) visiting sick workers and giving them advice or material relief, always with the idea of being charitable or philanthropic. By means of a kindly despotism these visits sometimes accomplished much in family crises. In any case, the aid was usually welcomed as something received for nothing, but was often valued by the recipient at its apparent cost.

This idea of the charitable employer clung to organized industrial welfare in its early days, hindered its development, caused much misunderstanding between capital and labor and was frequently the cause of discontent and animosity toward the employer.

The trained nurse probably first entered industry in 1895, when the Vermont Marble Company engaged a trained nurse² to visit the homes and care for the sick workers and their families.

In 1897 the Cadbury Company (chocolate manufacturers) in England established a health department which has been extensively developed. The department now provides physicians, trained nurses, masseuse, and convalescent homes. The account of these experiments is full of interest and will repay careful reading. Many dangers of paternalism seem to have been avoided, while the necessity of efficient medical and health supervision in any industry and especially in food industries is emphasized.³

In 1897 the benefit association of the employés of a large department store in New York employed a trained nurse to visit sick members and see that its funds were distributed fairly. It was thought that her nursing experience would

¹ Mrs. Gertrude Beeke Easley, National Civic Federation. A quotation from memory of a statement made by Mrs. Easley.

² Miss Ada M. Stewart.

³ "Experiments in Industrial Welfare," Cadbury.

enable her to do this work well and little or no consideration was given to her ability to be of help in any other way. The nurse employed ¹ found that her nursing skill and ability to give health instruction and wise advice gained the confidence of those she visited and that only in a few cases was there any question of malingering. Of these, many proved on further study to be a real incapacity or a sincere but mistaken conviction of inability to work. Experience proved to her that her services could best be used by giving first aid where needed, by providing prompt and suitable medical and nursing care for the sick and injured, by following up the cases to see that medical orders were carried out, that the patients returned to their doctors when necessary, did not return to work before able to do so or while in a condition to be a menace to their associates, and that financial anxieties and family cares did not retard recovery.

The field of the nurse in industry is still fundamentally the one discovered by this pioneer, with the broadening and development which accompany the growth of any agency meeting a distinct and long-felt need. The relationship in this instance between nurse and patient was particularly happy because the nurse received her salary from the funds of the benefit association. She was appointed by the elected representatives of the members and was really the employee of the workers. When this arrangement exists it is possible for the nurse to make occasional visits solely for investigation ² as the workers recognize the justice of such visits and their necessity for the protection of their own funds. Under any other plan visits solely for investigation by the nurse are of more than doubtful value. Where, however, she is *known* to be ready to help and is sent in a helpful spirit this objection does not hold.

About the time the trained nurse entered the field, farsighted employers began to realize that certain forms of in-

¹ Miss Anna B. Duncan, R. N., former Secretary of The Benefit Association of the Employees of John Wanamaker, New York.

² See Chapter III.

dustrial welfare and especially industrial nursing are "good business." The cost is now quite generally charged to overhead expense where formerly it was often charged to charity or occasionally even to advertising. This change of heart in the employer is nearly complete, but it sometimes remains for the nurse to do her part in bringing clearly before the employé the motives and kindly aims of the company for which he works; a task which vanishes when the worker co-operates in establishing and managing the funds which pay the nurse and which provide his sick benefit.

Various efforts have been made to solve the problem of the sick worker. It has often been a financial problem, but in these days of good wages it is frequently solely a question of educating the worker in the wise expenditure of a good income. With workers from many lands and from all parts of our own country gathered together in industrial centers, it becomes necessary for the far-sighted employer to do his part in making these heterogeneous elements into an American community. This can best be done through the children in the schools and through the women in the homes. The industrial nurse, as well as other public health nurses, may assist in solving two problems: the making of good American citizens as well as the care of sick workers. She teaches the worker and his family in plant and home how to live in order to keep well and how to avail himself of proper medical care when sick or injured. She shows him that his fears of hospitals and doctors are groundless, persuades him to avoid quacks and patent medicines and points out to him the folly of depending on a kindly neighbor for gratuitous medical advice.

Efforts for the care of the sick worker are gradually developing into the care of the well worker himself to keep him well, and into the care of his work rooms, house and community conditions in order to keep him, and also his family, in good health. Development has been along three lines: funds organized and financed by the employer alone; those organized and financed by coöperation between employer

and employés, each contributing a share of the cost and each having a voice in the administration; those organized and financed by the employés alone, either by the association of the employés of one plant (benefit associations) or by labor unions. The most acceptable to the self-respecting employé seem to be those funds to which he himself contributes and in whose management he has a voice, and those instituted by the employer as a definite part of his equipment, as necessary in the present state of society, as walls and a heating plant in our climate.

It is not within the scope of this book to discuss the relative¹ merits of these different methods. While about four-fifths² of the states have provided by legislation for at least a part of the care and compensation of workers suffering industrial injury, none have provided state administered health insurance or pension systems in general industry.³ Until public opinion demands such legislation, employers and employés will continue in increasing numbers to provide funds for these purposes. By means of experience so obtained the necessity of uniform laws and provision by the state for health insurance and old age pensions is being demonstrated. While these systems, as now maintained, solve many problems of the workers and assist the employer by reducing the labor turnover, they are often opposed by the workers. Employés so provided for often hesitate to take a more promising position with another company, knowing that by so doing they will lose claim to a pension and possibly to sick benefit.

Accident and sick funds, as now administered, offer some of the following advantages:—

1. First aid to the injured.

¹ "For Value Received, A Discussion of Industrial Pensions," by John A. Fitch, "The Survey," May 25th, 1918, Vol. 40, No. 8, p. 221.

² Statement from The American Association for Labor Legislation, 131 E. 23rd St., N. Y. City, June, 1918.

³ While Massachusetts permits savings banks to sell insurance, there is in this country no provision for general compulsory health insurance in any state.

2. Accident compensation.
3. Sickness compensation or health insurance.
4. Pensions.
5. Death benefits.
6. Medical care.
7. Nursing care in the plant.
8. Nursing care for the worker in the home.
9. Nursing care for the worker's family in the home.
10. Hospital care for the worker.
11. Hospital care for the worker's family.
12. Special care for the tuberculous worker.
13. Medical examination of workers.
14. Periodical reexamination of workers.
15. Sanitary inspection of plant.
16. Sanitary inspection of homes when owned by the company.
17. Loan funds.

Maternity benefits¹ also have been paid to the mothers of legitimate children provided these women entered the plant at least one year before the birth of the baby and remained at home for a certain time before and after confinement.

In addition to the above, provision is sometimes made for the services of dentist, chiropodist, masseuse and manicure, the latter specially in food industries.

The entry of the nurse to the plant has usually been by

¹ Maternity benefits to women in industry deserve careful consideration. They tend to keep women at work who should be at home. They encourage the early weaning of infants. Even though receipt of maternity benefit requires that the woman should have entered the plant one year before the birth of her child and that she stop work two months before her confinement and remain at home six weeks after, she goes back to her work at the earliest possible moment, sometimes being forced to do so by her husband, both husband and wife fearing that she may lose a subsequent benefit at her next pregnancy. Women with several children have been proud to say that each baby brought them a benefit from their employer. They did not relate this seeming advantage to the doctor's, druggist's and undertaker's bills, which had been paid on account of these same children. Neither did they think of their unattractive homes, their hastily prepared food and possibly intemperate husbands or of their own weariness and poor health.

way of the first aid room, but she has seldom stopped there. She soon found that the giving of first aid was one of the least of her duties, that it was only *one* of the many ways in which she found opportunities for service. Her value in industry, both to employer and to employé, steadily increased as she entered into the field of prevention.

In the plant she was often able to discover cases of illness while in the first stages and still curable. This was most frequently true in tuberculosis. She was often the first person to observe the early symptoms and, while she, of course, made no diagnosis, the worker often accepted the nurse's statement that a thorough medical examination was wise. She found health and accident hazards and was able to secure their correction. She found daily opportunities for teaching the workers in matters of health and safety and in the necessity for early medical care and prompt first aid treatment. In the homes she was able to do all this and much more. There she found unlimited opportunity to make use of all she knew of housekeeping, dietetics, baby care and cooking. The growth of her work was only limited by time, by her strength and vision, and by the initiative allowed by her employer.

Accident insurance, as in force in many states, has emphasized the need of industrial nursing. Health insurance will open to the nurse a still broader field. As legislation for accident compensation has lessened the number of serious accidents¹ in industry while increasing the number of *reported* injuries, so health insurance, when it comes, will lessen the total of industrial disease and other illness while probably greatly increasing the number of persons under medical care. As the industrial nurse has been found indispensable in caring for accidents and in their prevention, so will the demand for her services increase as health insurance for the worker, whether provided by the employer, by

¹ Mrs. Florence Kelley of the National Consumers' League has been heard to say that the only industrial *accident* is for a man to be struck by lightning while at work and that all other so-called industrial accidents are *preventable injuries*.

the worker, by both together, or by the state with a tax on both employer and worker, becomes general.

Whatever the final settlement of industrial problems, the nurse cannot be spared from industry. When capital and labor have learned that coöperation and mutual understanding are essential to human welfare, she will reach her full usefulness. She will continue to serve employer, worker and community as long as workers suffer accident or illness and while the laws of health are unknown or disregarded in plant, home or neighborhood.

CHAPTER II

THE QUALIFICATIONS AND TRAINING OF THE INDUSTRIAL NURSE

It is safe to say that most industrial nurses now in the field are still pioneers. There are, as yet, no fixed standards of work and few have had training for this particular branch of public health nursing. The nursing profession finds itself in the uncomfortable position of trying to meet the call for specialized workers, with few to respond. Many are being equipped in the school of experience but not in sufficient numbers to meet the demands of our present industrial development. It is an encouraging sign of the times, however, that schools for nurses and colleges are beginning to offer courses in preparation for industrial as well as other forms of public health nursing.

In the past the industrial nurse has been obliged to get the special education she needed after entering the work. While any nurse must always continue to increase her knowledge and ability in any position, the first steps will be easier if she already knows a little of what may be expected of her, understands something of industrial conditions and has an idea of mistakes to be avoided. If, in addition to this, she is an all round public health nurse she will be able to see and act quickly upon opportunities for service and work with a sureness and confidence which will come more slowly to the self-trained pioneer.

The time is past or passing when the employer asks solely for "a nice, motherly woman" as industrial nurse. He now more often says, "We need this work and want it started properly. Send us a well-equipped, experienced person." He looks to the nurse for real help in his problems and less often thinks of her only as an almoner, a detective, or merely

as an assistant to the company doctor. He frequently requires some one who can be of intelligent assistance to the company doctor, the employment manager, the sanitary engineer and the statistical department; some one who is able to coöperate with all departments of the plant and with local public health agencies. In plants where numerous divisions of responsibility do not exist, he sometimes expects her to take upon her shoulders work which is not exactly nursing but which is of such a nature as to aid in the prevention of illness and accident. These additional duties are quite within a nurse's province. All progressive social agencies aim to work steadily for the elimination of the need for their services. The medical profession is interesting itself more and more in prevention and so partially doing away with the need of treatment. Industrial nurses, as assistants to the medical profession, as public health workers and as social workers must aim in every possible way towards the time, foretold by Florence Nightingale, when nurses in general will become health nurses instead of sick nurses.

In addition to a "sick" nurse and a "health" nurse, the *worker* needs a friend, who holds his confidence, and who, on this account, is able to interpret to him the good will of his employer. A friend who has the sympathy and clear insight into his needs which will enable her to act as his un-official representative and interpret him to his employer.

In short, industry needs a good nurse with a knowledge of methods of social work in addition to familiarity with methods of public health nursing.

Industrial nursing must often be accomplished happily in surroundings not ideal. As conditions change, the nurse must be ready to develop new methods to meet them. If she loves her work, she will always see more to do than her employer has planned for her.

To meet all these needs of industry, the nurse must have a healthy, vigorous body, an understanding mind and an adaptable disposition. Only so endowed, by nature or discipline, will she be able to keep her courage, youth and zeal.

Industry has no place for the half-trained woman unless she is to be confined within the four walls of a first aid room and even there she is a potential source of danger.

The advantages of a liberal education before hospital training need no argument. The nurse's training school should give her the theory and practice of first aid and operating room technique, of obstetrics, baby feeding and dietetics as a part of the required course of study. In the third year of training or as a postgraduate course, the pupil should get an insight into public health nursing in an instructive visiting nurse association or nursing settlement. This should give her an idea of sanitary inspection, anti-tuberculosis propaganda, prevention of blindness, early detection of cancer, prenatal and baby welfare work and school nursing in addition to bedside nursing in the homes of the people.

Either during her preliminary education, hospital training or postgraduate work, the nurse should get a working knowledge of psychology and of civic, industrial, social and relief problems.

The writer has known the necessity for a knowledge of family budget making, for skill in buying, planning and cooking well-balanced family meals, for ability to devise suitable menus for workers' lunch rooms, for a facility in house-keeping, gardening, sewing, and running an automobile, all in addition to well-defined nursing duties. Experience in organizing clubs and recreations has been found useful by other industrial nurses. Ability to speak in public and to teach will add to efficiency.

Familiarity with the language of the workers will often save the day in a difficult situation. Even one word of a sick man's own tongue makes him feel that he is with friends. With slight effort, any one can learn a few useful words and phrases as they are needed. Where the workers are largely of one nationality, a little regular study and the available daily practice gives a fair working knowledge of their language in a short time. In a little Polish settlement the one

word (dobra—good) proved a good beginning for public health work. Later, with an interpreter, prenatal hygiene, baby feeding and bedside nursing were successfully taught. A few new words were acquired at each visit without any effort at study and with spelling entirely phonetic. Every one was anxious to teach his own tongue. No one was critical. A few words, accompanied by smiles and enthusiastic gestures, got the idea "across" even though the rules of grammar were disregarded. Miss Lillian D. Wald, author of "The House on Henry Street" has said that, though a knowledge of the language is important, the patient's conviction of sympathy on the part of the nurse transcends that. She rejoiced that, though she could not speak all the languages, she could smile in twenty-seven different dialects.

The trained nurse considering service in industry should question herself carefully before deciding to enter the work. Is she *really* democratic? Will she be willing to remember that she is a fellow worker and a neighbor as well as a friend and counselor? Will she work, not so much for industry as in industry and not so much for the employer and the worker as with and through them? Does she like people so well that she will listen willingly to their familiar gossip, and so in this way understand their own wishes and what they recognize as their own needs before she tries to lead them?

While a nurse is not expected to have any great knowledge of industrial disease, intelligent work demands some familiarity with the subject and especially with the diseases incident to the particular industry in which she is employed.

The proper handling of the daily problems often depends on ready familiarity with all provisions existing in community, state and nation for the care of the sick or for the education of the public in matters of health and safety.

The necessity of constant stimulus to renewed effort, obtainable by reading and study, is evident. Attendance at meetings of the National Organization for Public Health Nursing, the National Safety Council and frequent contact

with other nurses doing similar work make for increased interest, enthusiasm and ability.

Practical experience or even observation visits for nurses in training are hard to arrange. Until nurses already in the field and their employers are more ready to give students these advantages, dependence for practical experience must be placed on a period of service as assistant in a well-organized industrial nursing department. Such an apprenticeship, in any case, is the best possible preparation for undertaking alone the management of such a department.

All work for social and industrial progress will be advanced by a supply of nurses, fitted for the service, in sufficient numbers to meet the demands of industry.

CHAPTER III

ELEMENTARY PRINCIPLES OF INDUSTRIAL NURSING

In her book "Public Health Nursing,"¹ Miss Mary S. Gardner lays down eight fundamental principles of public health nursing:

- “1. That only well-trained nurses should be employed.
- “2. That the nurses should not be the distributors of material relief.
- “3. That there should be no interference with the religious views of the patients.
- “4. That the rules of professional etiquette should be rigidly observed.
- “5. That coöperation in all its forms should be recognized as of primary importance.
- “6. That suitable and accurate records should be kept.
- “7. That patients unable to pay for nursing care should receive free service, and that those able to pay for it should do so according to their means.
- “8. That the daily working hours of the nurses should be limited, in order that good work may be done and they themselves be kept physically fit.”

Industrial nursing is public health nursing with additional responsibilities, different surroundings, and perhaps, in some ways, more strict limitations. No one will dispute that 1, 3, 4, 5, 6 and 8 apply with equal force to industrial and other forms of public health nursing. Any one in doubt on the subject is advised to read Chapter II of Part I of Miss Gardner's book. There remain then 2 and 7. We will endeavor to show that, while an industrial nurse may find it necessary to dispense material relief, the arguments against

¹ "Public Health Nursing," Miss Mary S. Gardner, page 55.

the practice are even stronger in her case than in others and only when no other course is open should she have recourse to it. The industrial nurse is not in any sense a charity worker. She is employed as a part of a regular provision for the well-being and efficiency of the workers. If she allows herself to be the means of bringing in charity, she destroys her best hold on those she serves. If she allows herself to be anything but a helpful friend who is also a coworker, she will lose much of her influence with her patients. They will soon forget the nursing care, helpful advice and teaching if they find that gifts of material value are obtainable through the nurse. It is only human to value tangible above intangible benefits. Of course the workers of a better and more independent spirit will not *wish* charity, and, in the long run with all, the nurse will gain nothing by a relation which permits any other interpretation than that of being considered one of the generally accepted and universally welcomed provisions for industrial safety, health and happiness.

Of course no nurse will allow a patient to suffer for the lack of help. Some means will be devised. The self-respecting worker appreciates a loan fund, maintained by the company, by the workers, or by both together, from which sums may be borrowed in time of need and repaid when the emergency is over. Where there is such a fund, there is no objection to the delivery of borrowed sums by the nurse. Neither can any harm come from the nurse taking to the patient any *regular* income such as a salary allowance or a sick benefit. In fact she should not forget the possibility of such relief being available and she should do all she can to secure its prompt and regular payment. One of the best aids in preventing the demoralizing influences of physical misfortune is the continuation of some sort of *regular* income on which dependence may be placed and with which plans may be made. If the employer, benefit association or other industrial relief organization takes no responsibility, as in the case of a new worker, it may be necessary to refer the sick person or his family to a local relief agency or even to town or

county poor officers. In no case should this be done without the consent of the person concerned or without the sanction of the person in charge of such matters at the plant or in the office of the industrial relief organization, if such exists.

A nurse often lacks the social training to enable her to give relief wisely and, even with the training, her time may usually be better occupied if she can find an expert for this difficult, specialized work.

We may usually omit the question of pay for services from the problems of the industrial nurse. If the nurse is employed by the company, it is as a worker whose services are necessary to the efficiency of the other workers and each one should feel as free to seek all the help she is allowed to give as he would be to send for a specialist to make repairs on the machinery. When, as sometimes happens, the industrial nurse coöperates with the local visiting nurse association for the nursing care she has not the time to give regularly, the question of proper payment to the association must not be forgotten. If the employer is willing to assume the cost of such visits, a report should be made of each case attended and a weekly or monthly summary of visits should be submitted. If there is no such arrangement, the nurse will carefully explain to the worker the difference between the way in which she comes to him and the means by which the services of a visiting nurse are made available to the community. When he understands the method of support of the visiting nurse association, he will usually, if able, be glad to pay according to his means. In case he is unable to pay, a word with the superintendent of the association will undoubtedly place him on the same footing as others in need of nursing care.

A ninth principle should be included for the industrial nurse. *She should not be a detective.* She is useless in any capacity but that of an intimate, confidential friend and teacher. In industrial establishments, there are persons who may think their aims will be furthered and their departments, or the organization as a whole, strengthened by utilizing the nurse in such errands as finding out the whereabouts of a

worker, whether he is drunk, etc. The nurse will do well to nip such tendencies in the bud. She should make it clear that she visits the worker only to be of service to him. If she keeps this in mind, she may be able to help the man she finds intoxicated and the girl who has gone to the picture show when her mother thought she was at work. There are few calls that a nurse may not advantageously answer if she remembers that she is not a detective, and if she impresses every one with whom she comes in contact with the right conception of her work. She may acceptably visit any one at any time if she is sent in a helpful spirit, but without this purpose she cannot be expected to pry into the affairs of others.

In cases where malingering is suspected, the nurse has no responsibility at all. It is a physician's business to make the diagnosis of malingering as well as all other diagnoses. The nurse's duty ends when she has relieved discomfort, carried out the physician's orders for treatment and stated to him any symptoms she may have observed. The question of malingering is a very small one. Many cases of supposed malingering prove later to have been obscure conditions often more serious and harder to cure than something which was at once self-evident. Tactful treatment by the nurse will sometimes bring the diagnosed malingerer back to work and will do much in those not infrequent cases where the patient needs to be convinced that it will not hurt him to take up work again.

CHAPTER IV

THE INDUSTRIAL NURSE AND HER FELLOW WORKERS

The scope of the industrial nurse's activities is almost as varied as industry itself. It ranges all the way from definite, limited nursing duties, as part of a large welfare department under a welfare director, and with the health department in charge of a physician, to duties which include the supervision of all the welfare work done in the plant.

Large concerns often devote great sums of money to extensive work for the betterment of industrial conditions and the welfare of the workers and, in such an organization, the nurse may find little work for which she has not been prepared by her training in hospital and public health nursing. If there is but one nurse, her duties may be only those of a nurse, there being other trained workers in the plant with whom to coöperate for the full welfare of her patients. If she has the supervision of other nurses she will have, in addition, the duties of an executive. She may also have clerks, cleaners and other workers on her staff. She often begins as the only nurse, being given additional help as she develops her work and proves the necessity of assistance. There is much to be said in favor of this slow growth either in a large or a small plant. Many mistakes are avoided and the nursing department is better adjusted to the particular needs of the industry.

A welfare superintendent, who may be a nurse, often has general supervision of the employment department, sanitation of the plant and tenements of the company, pensions, compensation, sick benefits, material relief to workers in financial difficulties, care of industrial injuries, care of sick, education, recreation, etc. According to the size of the plant, there may be, as assistants or co-workers, a number of other trained workers. There will be a physician. A social

worker, a sanitary and safety engineer, a dietitian, club managers and other specialists, as well as a nurse, may also be on the staff.

It is not necessary to go into the organization of industries further than to show the nurse, whose experiences may have been along other lines, some of the conditions under which she may be expected to work. The questions of management are handled in almost as many ways as there are kinds of industry. The nurse need not trouble herself with these problems except as they affect her efficiency.

In some industries the nurse may be employed and paid by the workers themselves through benefit associations, or other organizations of workers. This arrangement has many advantages. The friendly understanding between patient and nurse is prearranged. The help of the nurse comes as something the patient has paid for and he values it accordingly. However, any nurse, no matter how paid, will have no difficulty in gaining the confidence of those she serves, if she has an unselfish desire to help them.

In those industries where the employés have a voice in making the plans for their own welfare, the nurse is often responsible to a committee of workers. This necessitates regular meetings which should be welcomed by the nurse. Not only will she have stated times for explaining what she is doing and what she would like to do, but she will have a priceless opportunity for the advancement of her own industrial education. The members of the committee will be able to explain local prejudice and customs, assist the nurse in her study of industrial hazards, and as representative employés, give to her efforts a backing hard to equal. The question of material relief is sometimes undertaken by the members through these officers, much to the satisfaction of the unfortunate but self-respecting worker. Here the nurse should keep her hands off where possible, only acting in an advisory capacity, and allowing the actual aid, unless a regular allowance, to come through some other medium.

Another means of helpful conference is to be found in the

regular meetings of department heads, foremen, safety experts, and others, which are a feature in the management of some plants. Here problems which touch more than one department are discussed and plans are made by which the work of the plant may be carried on with the least possible overlapping and friction.

Other firms place the consideration of all questions of detail in the hands of the chief executive. Each method has advantages. The nurse must be able to reach the ear of the committee, or the executive, or the member of the firm having power to act in behalf of her work. She will soon learn the wisdom of presenting facts rather than surmises to busy people and will have them carefully written out together with definite suggestions.

The industrial nurse cannot reorganize the industry to suit her convenience, and any plans she may have for the betterment of her work should have the careful consideration of herself and of her associates before being placed before an executive meeting, or a busy general manager, or a harassed employer.

The nurse will learn much from her associates. It is true that they may also learn from her, but her popularity will not suffer by suppressing in her dealings with her co-workers her desire to teach. She will best obtain their liking, respect, and coöperation by showing plainly that she has no wish either to do their work or to show them how to do it, that she is a nurse first and that if she attempts other work it is only because, at the time, there is no one else who is better fitted to carry it through.

This is a good opportunity to say that the nurse should be very sure, before undertaking *any* work outside the boundaries of public health nursing, that no other available worker is better equipped for its successful accomplishment.

In a small plant or in one with a smaller welfare department, the nurse's duties may have a wide range. In general she should be willing and, in a measure prepared, to do whatever needs to be done. She should even study the question of

administering material relief wisely. Her usefulness may, at some time, depend on this preparation.

The industrial nurse in the small plant is apt to be allowed a good deal of initiative. She comes in closer touch with her employer, who is often the owner of the plant and who may also be a worker in it. He becomes familiar with her abilities and is more ready to take advantage of her help in varied problems than the employer in a larger plant who may seldom or never see the nurse. Her work should be such as to show the value or necessity of each step she takes and she should take care not to waste her time, which is her employer's, in experimentation and random efforts. Her records and reports will help her to avoid these difficulties.

The company doctor, at least in states having compensation laws, attends all industrial injuries requiring surgical care. Some firms make provision also for the medical care of the workers, and even in some cases for the care of the families as well. Benefit associations and mutual aid societies frequently make such provision and some labor unions as well. Industrial diseases have been construed by courts in some states as coming under the same compensation rulings as injuries of a violent nature and many firms so treat them without legal compulsion.

Different arrangements are made by many firms for the medical attention required by law. In small towns, where the industry is the reason for the existence of the community, the company will often maintain a hospital for its workers and their families. The industrial nurse may have charge of such a hospital. Where a general hospital, even though in a neighboring town, is available, many employers do not wish the responsibility of maintaining their own hospitals. They consider, rightly, that the seriously injured worker will be more apt to receive the best attention in an institution where the foremost specialists of the locality are on the staff.

Certain firms employ a physician for a stated number of hours daily, or at other regular intervals. In other plants, one or more local doctors respond to calls when needed.

Occasionally all the doctors in town are employed, the patient being free to choose among them.

The good custom of employing the full-time services of a physician is growing. In large establishments, several doctors may be employed, together with eye, ear, nose and throat, and other specialists, dentists and even chiropodists. In addition to the surgical and medical care of the workers in the plant, and possibly in the homes, many firms require the physical examination of all new workers and sometimes the reëxamination, periodically, of all employés.

Contrary to common opinion, these examinations are seldom for the purpose of excluding the handicapped, except where there is danger of contagion to fellow workers or of contamination of product. The usual aim is to prevent employment in an occupation dangerous to the employé's well-being. The reëxaminations make possible the transfer of those requiring it to more suitable work. They also discover many diseases in the early stages, while still curable, frequently before the worker is aware of his condition. Half-sick workers, discovered in this way, are often treated in the works dispensary or sent to private physicians for conditions which may be controlled in the beginning without loss of time or with a short rest, but which, if neglected, might easily prevent all work or even prove fatal. The average worker without medical supervision will endure what seems to him a slight illness until his misery forces him to go to a doctor. The aim of most firms is not to interfere with the private practice of local physicians, but to coöperate with them in raising the health standard of the community.

In plants where the examination of employés is in the hands of physicians connected with organizations of workers, such as mutual benefit associations or labor unions, there seems to be little opposition to these examinations on the part of those benefited by them.¹

¹ For interesting discussion of this subject, see "Physical Examination of Employés," John B. Andrews, Secretary, American Association for Labor Legislation.

"Furthermore, the workmen's present objections to medical examinations conducted by physicians hired by employers would disappear when the examinations were undertaken by a staff of physicians employed by insurance funds. The loss of employment on account of ill health will be more than counterbalanced by the opportunities for quick recovery when every worker suspended on account of physical unfitness will be entitled to sick benefit administered, not by the employer and his hired physician alone, but by representatives of employer, employé and state."¹

An industrial physician for a large plant has repeatedly stated to the writer that the nurses were invaluable in explaining to the workers the real purpose of the physical examinations required by the company and in getting them to submit gladly. They have also succeeded in getting many patients to come voluntarily for reexamination. The nurses in this plant had been employed before the physician. They had demonstrated that a *full-time* physician was a necessity and their recommendations carried great weight in the decision to employ one.

The question of coöperation between the full-time company doctor and the industrial nurse is usually solved by the observance of customary professional etiquette.²

Many plants, however, cannot have the full-time service of a doctor. Unfortunately some firms have even considered they had done all that was necessary in engaging a nurse and, most unhappily a nurse has, in a few cases, taken a position where there was no physician, even nominally, in charge of the medical and surgical work in the plant. This has done harm by creating a misconception of industrial nursing in the minds of physicians and in overemphasizing to the worker the importance of the nurse from a medical standpoint. It seems doubtful if, at the present time, any nurses of good

¹ "Physical Examination of Employés," John B. Andrews, Secretary, American Association for Labor Legislation.

² The whole subject of professional etiquette is treated fully and beautifully by Miss Mary S. Gardner in her "Public Health Nursing," Part I, Chapter III.

standing are working in industrial first aid rooms without a physician to diagnose, to direct the treatment of cases and to supply standing orders for use in his absence. Even small employers are realizing the limitations of the nurse and are availing themselves, in addition, of the services of physicians at least for part of the time.

The doctor and nurse each has a place in industry and the nurse should no more be expected to usurp the doctor's office than the doctor should be expected to do the nurse's work.

Owing to the lax standards which have occasionally existed in the past, industrial nurses should be more careful than others to avoid even the *appearance* of giving medical or surgical care without the supervision of a physician. When giving treatment in the absence of the physician, the nurse should explain to the patient from time to time that the dressing or special treatment is given because it has been ordered by the doctor in charge. Patients, ignorant of professional etiquette, often cause misunderstanding of the nurse by boasting of her cleverness and declaring that she knows more than most doctors. Even though this is an expression of gratitude, it must not be allowed. The tendency can best be overcome by seeming to ignore it and by carrying on a continuous campaign of education. It is also well to explain incidentally the *legal* side of the question.

The *part-time* company doctor has sometimes been known to present a problem in accomplishing good team work, which may be traced to the financial arrangements made with him by the company. Where the *part-time* physician has a stated salary, calls at the plant daily or at other regular times, responds to emergency calls and attends patients who may be referred to him, a capable nurse has little difficulty in obtaining his support and cordial coöperation. On the other hand, where the physician is paid according to the number of dressings done or patients seen, he occasionally feels, and indeed has been known to say frankly, that the nurse at the plant was taking money out of his pocket. Perhaps she was.

This is an indication for better arrangements with the doctor—not for dispensing with the nurse.

By giving prompt first aid and by getting patients to the doctor in time, the industrial nurse *can* prevent numberless infections. Consequently much money is saved to the company which would otherwise be spent for the surgical care of the workers.

On the other hand, by finding patients in need of medical attention, she increases the number of his interesting cases and gets many patients under the physician's care while something can be done for them, thus helping to increase the value of the doctors to the community. Workers speak willingly to a nurse, who is their friend, about conditions which would not otherwise be brought to a doctor's attention so soon. The nurse, in her daily contact with the workers, has the best of opportunities to observe those in need of medical care and she can usually persuade them to see a doctor.

While the nurse is careful to make no diagnosis, to recommend no particular physician and never to advise a change of doctors, the company physician, together with all the other physicians in the community, gets a larger number of curable patients and has a better chance to show the value of expert medical and surgical care than where no nurse is employed.

The condition just described is more typical of a small town than of a large city but the difference is only that, in a large city, the nurse's work, being spread over so great a surface, is less apt to attract attention and comment.

The majority of physicians are far above such petty considerations and are too busy with important things to give them a thought.

Some firms employ two or more doctors, allowing the injured worker to have his choice, the doctor chosen coming to the plant, or seeing the patient in his office or in the patient's home, the exact arrangement often being left to the judgment of the nurse.

The employment of several different and not always like minded physicians complicates matters for the nurse. Her salvation lies in the coöperation of each doctor with all the other doctors and with her. Standing orders must be obtained for the nurse and they must be signed by all the doctors who are employed by the company to attend industrial injuries. This is a difficult thing for the nurse to attempt and may better be done for her by the employer. In one instance, where the first aid methods of the three doctors employed varied, an employer submitted to them a first aid pamphlet published by a large safety organization. This was only intended as an illustration of something simple, safe and practical. It was, with a few additions, approved by the doctors. The nurse was then able to give first aid and to teach it to the workers, feeling that she had the support of all the doctors employed by the company. Previously she had tried to work with three sets of standing orders and the resulting complications. Fortunately no one died, not even the nurse, but harmony did not exist until there was one set of standing orders approved by all three doctors.

To the greater number of industrial physicians, the nurse has only to prove her honesty of purpose and her ability to help them and their patients, to be accorded hearty co-operation and support. Sometimes this is slow of accomplishment but, where the aims and ideals of both are the same, it will come in time.

The coöperation of the other employés is as necessary as that of the physician and other welfare workers. A first aid room or dispensary is of little use if the worker does not realize the importance of having all injuries treated. A doctor's visit is a waste of money if the patient does not do as he is advised. Safety devices are of no value when out of order or unused. The nurse must devise means for bringing these and other matters before the workers. This question will be taken up more fully later.

If the first aid room is made democratic by the impartial treatment of all workers, its popularity and value are in-

creased. In some plants, all persons connected with the establishment, employers, managers, office boys and scrub women are treated, when necessary, in the first aid room and even at times in their own homes by the visiting nurse. This policy places the medical or nursing department plainly in the minds of all as a necessary department of the plant and not as a charity.

The industrial nurse cannot reach her *full* usefulness without the coöperation of each and every person in the plant, but if this ideal is not attained at once the nurse must neither grow discouraged nor abandon her efforts.

It will never help matters to take sides in any labor disturbances or in any disagreements between various factions in the organization. The nurse should not discuss such subjects and should keep her personal opinions to herself. Her duty is to serve both sides to the best of her ability. Loyalty to her employer and to her patients may require her to interpret one to the other but she should be neutral, although helpful in promoting peace and good feeling. Where the nurse does not feel real loyalty to her employer, she will surely be more useful in some other field of effort.

Even more important than gaining of coöperation is giving it. To be able to coöperate, we must see things through the eyes of others. We must gain an insight into the character of people, their early environment, their habits and superstitions, their present surroundings, their abilities and opportunities, their interests, hopes and ambitions.

CHAPTER V

THE INDUSTRIAL NURSE AND THE COMMUNITY

The importance of the industrial nurse as a factor in the community will depend first on herself and second on the initiative allowed her by her employers. In any case it will be a matter for slow and conservative advance with strict observation of the wishes of the employer.

The nurse should make it one of her first duties to discover all the resources of the community which may aid her in her work. She should compile a directory, if one is not published by an organization, containing the names, addresses, telephone numbers of health and poor officers, physicians, dispensaries, hospitals, lodges, charity organizations, baby welfare agencies, churches, clergymen, reliable housing, rooming and boarding agencies, etc., and any special information concerning them. In a large city such a directory may often be obtained from the charity organization society. Whether working solely in the plant or in the homes as well, the nurse will have frequent need of information from some of these sources.

Through her employer, the nurse may become an important factor in the general community welfare.

In a small plant known to the writer, the nurse busies herself with all sorts of civic problems. Through her employer and with the coöperation of the health department and the transportation company, she has been able to secure shorter headway between cars during rush hours, thus avoiding needless exposure of workers and much consequent illness. Through her influence, a shelter has been built at the trolley station. The abatement of industrial nuisances, such as smoke and fumes from neighboring plants, was secured by

proving to the employer the harm they were doing his workers. A letter to the owners of the offending property from the nurse's employer was followed by consultation with state and federal health officials. With the advice of these experts, proper consumers and chimneys were constructed. This nurse is now arousing interest in an evening dispensary where workers may secure medical care and pay for it. In her small plant, she has time for many things which might not be advisable, even if possible, for the nurse in a larger place.

It is possible for industrial visiting nursing in a small community to be done in such a way as to stimulate a desire for a like service for all classes of the population, and to lead to the formation of a visiting nurse association or even to visiting nursing under the board of health. Baby welfare work and prenatal care may be quietly initiated in the same way.

The industrial nurse will, at least, be able to show what good nursing is and to set a standard for such work which will do much to prevent the employment in positions of responsibility of untrained or half-trained women.

An industrial nurse, living among the workers in a house¹ provided by her employer, has a unique opportunity for service. At the house she may hold prenatal classes, baby welfare conferences, little mothers' classes, and even teach cooking, sewing and English. In a small town, the house, while serving as a community center, would furnish a practical and simple example of comfortable furnishing and the garden could be used to stimulate the enthusiasm and competition of the neighbors.

Even though the industrial nurse finds no opportunity to do any of the big things, she must not fail to be a good neighbor as well as a good citizen.

But if her employer allows her a reasonable amount of initiative, and if she also has his close and interested co-operation, she should be a strong factor in stirring up com-

¹ See Chapter XII, The Industrial Nursing Center.

munity interest and in keeping it fixed on the common community problems and should be able to assist in the solution of many community difficulties. In a small town, she should find it possible to demonstrate the need of prenatal, infant and child welfare work and school nursing; she should be capable of giving reasons for an increase of local hospital facilities, especially for the care of tuberculous patients, contagious cases and those self-respecting people, forming the majority of most communities, who are not objects of charity, but who, when sick, need care as much as the charity cases and as much as the richer members of society. These are the people who are able to pay the actual cost of comfortable care, but who find the prices of the private patients' department of a hospital prohibitive, or such a tax on future earnings that much actual harm is often done the patient by the worries he cannot escape.

Until slowly awakening public opinion writes health insurance into the laws of all the states of the union, the problems of this middle class (made up of most of us) will need the thought of each person who may be able to help in any way, however small.

The industrial nurse cannot escape being a factor in the development of good laws and in the furtherance of health insurance because she unconsciously influences so many people. She teaches the money value of health and demonstrates by actual facts to her employer, as well as to the worker, the benefit of even a little attention to its preservation.

In exerting an unobtrusive influence in the community and in finding out the needs and the wishes of the people, a wide variety of contacts is of the greatest help. The industrial nurse who can possibly find the time will learn many things by taking into her life as much as she can of the social life of the town. If there is a woman's club, a civic association, a community council or any organization which should be in touch with local questions, the nurse may gain much by becoming a member and by taking an active part in bringing

matters before the organization, in getting them discussed from all points of view and in preventing important questions being "laid on the table" because no one has the courage to tackle them.

Sometimes a word to the right person will start the ball rolling and no further action on the part of the nurse is necessary. If the person initiating the movement can be placed in the agreeable position of having thought of the need himself, so much the better.

We must not forget that we cannot move people along the road of progress one bit faster than they see the need of being moved. We must remember that the best and most productive efforts for the improvement of any group have always had their origin within that group. Individuals, each one working for his own good and for that of his fellows, are happier and better people than the same persons treated as a "class."

So nurses, as individuals, working with and through those with whom they come in contact, rather than for them, cannot fail to further to some extent, public welfare and democratic ideals as well as public health.

CHAPTER VI

THE FIRST AID ROOM NURSE

The employer often engages a nurse with the idea that she will be responsible for the first aid room and with little thought of any further development of her work. He will sometimes tell her that the number of industrial injuries is small, perhaps as few as an average of one a week. Of course he believes this to be true but inquiry will usually reveal that no thought has been given to the scratches, small punctures, cuts, splinters, burns, etc., which, without a nurse's presence would have no care, other than possibly that of the unskilled fellow worker, unless serious consequences developed. It will also be found that injuries of this class, where existing records make a distinction possible, often cause a larger total surgical expense, a greater loss of time from work and more annoyance in the settlement of claims than all other kinds of industrial disability.

The first result noticeable, after the establishment of an efficient first aid service, is a tremendous increase in the number of reported injuries, followed at once by a marked decrease in the number of infections and of belated claims for compensation, together with an appreciable reduction in the expenditure for the care of such cases. These later results are just what the employer wants, but he may find it hard to reconcile the apparent increase in the numbers of those injured until he realizes that the desirable results are only to be accomplished by this means. "No break in the skin is too small for first aid," should be the slogan.

The foremost requirement for an efficient, or even a legal, first aid room in an industrial establishment is a physician employed by the company to care for the cases of serious

industrial injury and to direct the treatment of the small injuries which require little more than first aid care. No nurse, who values her professional standing, will consent to carry on such work where there is no doctor to assume the moral and legal responsibility of medical and surgical treatment and to direct the nurse in her care of minor injuries and ailments.

A physician, devoting a limited time to the needs of an industry, sometimes asks a nurse what standing orders she requires. In such a case she should suggest as simple and limited a list as possible, including the care of small breaks in the skin, burns, contusions and any special small injuries peculiar to the industry. The latitude allowed the nurse in giving medicines should be rather less than that often permitted by the average physician accustomed to working with trained nurses.

After the nurse has obtained standing orders, she must make it plain that she uses them. Lacking the right relation between the doctor and the nurse, the patient is sure to suffer from want of confidence, the physician will not have the nursing assistance he has a right to expect, the company will be annoyed by a department that does not run smoothly, and the nurse will be sure to suffer numberless misunderstandings and discouragements and may even find her position untenable.

Special thought should be given to the matter in those plants employing two or more local doctors as described in Chapter IV.

On beginning industrial nursing in a plant, with only part-time service from a doctor and where no such work has been done before, the nurse should lose no time in making herself familiar with her surroundings. If actual nursing can be postponed for a week or so, everything being allowed to go on according to custom, the nurse will be able to see how much of the old may safely be preserved and what immediate changes are necessary. To this end she may request the management to allow some one, thoroughly familiar with every part of the plant, to accompany her on a tour of in-

spection. In this way she can meet the various heads of departments and the foremen and get an idea of the geography of the plant. Many workers will find out who she is and be more ready to approach her later. She should, at this time or during a subsequent tour by herself, locate as many as possible of the first aid outfits in the plant. She may find all sorts of most surprising materials, salves of all sorts seem to be the favorites, and each will be very precious to the one who has accumulated them and who probably has a little following to whom he ministers. These outfits must be cleared up and out and without hurting the feelings of anyone. Employés who are naturally interested in such things are, through their influence on their fellow workers, valuable allies for the nurse if she can get their understanding and coöperation. They often have quite a name for themselves among their associates as being "as good as the doctor" but their very interest and intelligence, while dangerous if undirected, often makes it easy to convince them of the advisability of letting each man stick to his last, doctor and nurse as well as cobbler and carpenter. If the nurse can teach these men, or better, show them why it is dangerous to use shoemaker's wax, paint, tobacco or what not on wounds, she will perhaps have taught all the workers in several rooms through them. She should remember that these men have cared for the injuries of their fellows, not for personal gain, but often at a loss of valuable time because they saw a need which no one else was meeting.

Employer, foremen and many workers will soon recognize, in the freedom of the injured from infection, justification for the presence of the nurse, but she must not forget to *advertise* her work. Publicity and advertising are necessary in selling good industrial products and they are no less helpful to the industrial nurse in enabling her to give what she has to the greatest number. The rare, and probably preventable, spectacular events advertise themselves, but the necessity of painstaking care in seeming trifles is hard to teach.

In the beginning her fellow workers will take an intense interest, for a time, in what the nurse is doing. Even in the quietest and most humdrum establishments, the imagination of many will picture her as spending her time in holding bleeding arteries, in bandaging frightful burns and in other hand-to-hand encounters with death and disaster. As in reality the spectacular seldom does and never should happen, it is wise, before this interest cools, to make a special effort to show the preventive work that is being done and its results. In any busy first aid room a month or less should give material for a report which will show that the new custom of having each break in the skin treated has, even though increasing the number of reported injuries, reduced to almost zero the number of infections. If her records are carefully kept and tabulated, she should also be able to show that infections developing in small injuries have followed the interfering treatment of the fellow worker, or neglect in applying promptly for first aid. Barring injuries requiring a surgeon's care because they require more than first aid, the writer has yet to see one infection develop where prompt first aid was given to the untouched wound by an industrial nurse and where the dressing was left undisturbed until removed by her.

A little story of the first month in the first aid room may be written so as to interest the workers if its distribution is allowed by the management. Even if only given to the foremen to be posted, it will reach many, if each foreman has been made to feel that he is an important link between the nurse and the workers. The foremen will always be the nurse's best allies. Without their help and understanding she will find it hard to reach the workers.

Other means for securing the attention of the workers will reveal themselves if the nurse is continually on the watch for chances to show the preventive side of her work, both in the plant and in the homes.

Where the company physician spends all, or even a large share of his time in the plant, he will probably wish to devise his own methods for this sort of publicity and advertising.

The nurse, however, is in the best of positions to assist him, and most physicians in industry would be glad to benefit by her observations and by the opportunities derived from her close contact with the workers.

Employers, managers and department heads are easily persuaded to make a trial of having the least injury treated in the first aid room, and, as soon as they see the quickly following results, become enthusiastic champions of the policy.

It remains to educate the rank and file of the workers. This is necessarily a never ending task. Old employés forget or think their own injuries of no account, especially those who have never happened to have had an infection, and new workers appear with startling frequency. Effort must never be relaxed and the foremen and others in charge of workers must never be allowed to grow lax. Notices in pay envelopes and posted in conspicuous places throughout the plant, talks to the workers in their work rooms at five minutes before closing time, noon hour talks in the lunch room, all help. New ways of saying the same thing must be invented and must be so worded as to be understood by every one. Stories of the experiences of a fellow worker will have more effect than any number of circulars from a publishing company, especially if the worker will tell his own tale at an informal meeting. It is, unfortunately, easy to find the stories. Too many instances occur in any plant which illustrate the dangers of neglect. A rehearsal of the troubles of some one who has recently neglected a seemingly slight injury has all the human interest of any other gossip and is surely a legitimate way of turning a common human failing to account. These little stories interest new comers also and impress them with the importance of the first aid department.

Inspirations for the spreading of benign gossip come when one is busiest and are apt to be forgotten. A pad and pencil in the pocket or a word to the assisting clerk will "nail" the idea and preserve it for future use.

Much educational work can be done in the ways described

and with individuals, but more far-reaching methods are needed. It reflects on some one's forethought when a worker appears with an old wound badly infected and says he did not know there was a nurse in the plant. For the protection of the company as well as for the safety of the worker, there should be some sure way of informing each new employé of the provisions made by the company for his comfort and safety. Where possible, it is helpful for the nurse to talk to the new employés engaged each day. This can be done, if allowed by the management, through coöperation with the employment department. After the people have once seen the nurse and heard her speak, a strange and unreasoning but common fear of nurses and first aid disappears. Where such interviews are the rule, no one can say he did not know, and many infections will be avoided. Such a system with a well-enforced rule that each wound, however small, must have first aid will do much to prevent workers claiming compensation for injuries which happened at home or elsewhere on Sundays or holidays. It is often impossible to prove where an injury occurred unless it is reported at once and, whatever the final settlement, one side or the other is sure to feel that justice has not been done.

Frequent visits to the work rooms help to make the nurse a familiar figure to the workers. Such visits also give her a better acquaintance with the heads of departments and foremen and, through them, a familiarity with the different processes and their hazards. If the nurse is careful never to intrude at a busy season, she will find that all the time she can spare for these visits will be well spent. After acquaintance with the heads of departments and foremen has been established, much detail may be arranged over the telephone but, in the beginning, every opportunity for getting in actual touch with as many people as possible should be seized. It may be well to say here that the telephone switch board of many establishments is a sort of local newspaper and that discussion of the personal affairs of any one has no place over such wires.

The first aid nurse will find her patients to be of four general classes:—Small injuries¹ which no one would think of sending to a doctor as they are easily cared for in the first aid room, cause no loss of time from work and for the care of which most industrial physicians are glad to give the nurse standing orders; more serious injuries which are sent to the doctor at once but which are frequently sent back by him to the nurse with directions for subsequent care; patients suffering from some apparently unimportant physical discomfort, making work unwise for a time, who may be relieved by rest, heat or other simple means; acute medical or surgical cases which develop while the patient is at work but with causes having no apparent relation to his employment.

The greater part of the work of the first aid nurse will usually be the care of small injuries, mainly those which would, if left to the judgment of the worker, have no care at all, or worse than none unless an infection occurred, and would then often be neglected until the condition became such as to cause inability to work. We have already seen how, in the prevention of these needless infections, the nurse has the first chance to show the value of her work. Records will usually be available so that the nurse's first six months or year may be compared with preceding similar periods. If a capable industrial nurse is in charge of the first aid work, the results are always the same—a marked saving in time lost from work and an appreciable reduction in the sum expended by the company for the settlement of claims for infected industrial injuries. It should not be the special concern of the nurse to reduce the medical bills of a company except by preventive work. It is even true that they may increase after the nurse is installed for she will find many things, other than infections, which require the care of a physician. Elaborate discussion of first aid methods would be out of place in this volume. The industrial nurse's hospital training

¹ Where the industrial physician does actual work in the plant, the nurse may possibly be expected by him to attend injuries of a more serious nature than she would be justified in handling without his immediate presence.

has already taught her to meet emergencies. She knows how to treat hemorrhage and shock and how to give artificial respiration. She knows the necessity of aseptic and anti-septic dressings. She will have the standing orders of the company doctor to cover the daily dressings and the care of the slight indispositions of the workers.

It is true that she may be called on to give first aid to injuries which are not minor injuries. She may have to do something she has only seen others do. She may have to meet an emergency in any part of the plant where conditions are not, to say the least, what she would find in an operating room or in her own first aid room. If she keeps calm and takes time to think, the right thing to do will reveal itself to her. If she herself remembers and teaches others that instant action is only necessary in two conditions, she will save much unnecessary haste and confusion with resulting danger to the injured person. These two conditions are, first, profuse venous or arterial hemorrhage and, second, arrested respiration from drowning, electric shock, or asphyxiation from poisonous gases, pressure on the throat or foreign body in the larynx.¹

Shock may need prompt attention, but this is a condition familiar to the well-trained nurse and she will see that the patient is warmly wrapped and stimulated, if advisable, while the ambulance and physician are being summoned.

The first and last warning to the nurse giving first aid is not to do too much. First aid is a temporary means. The nurse need not consider the proper treatment of the injury but only try to prevent immediate dangers and to keep the patient in as good a condition as possible until the surgeon can take charge of him.

If the first aid department of the plant is well organized, there will be easily available a supply of sterile gauze suffi-

¹ Paragraphs dealing with the treatment of industrial injuries have been made purposely as brief as consistent with a reasonable preparation for handling emergencies. They are not intended in the least as directions to the nurse nor can they be used to supplant the standing orders of the industrial physician.

cient to cover a large wound, tourniquet, splints, etc. Of course no cleaning of an extensive wound is allowed until treatment is begun by the surgeon.

The more serious first aid problems, then, are simple if the nurse remembers four points:—

1. Treat profuse hemorrhage instantly.
2. Treat arrested breathing instantly.
3. Treat shock promptly.
4. Do not wash extensive wounds or remove clots. Cover with sterile gauze or clean material while waiting for the surgeon.

Working slowly, calmly and quietly, any well-trained nurse will do the right thing at the right time. If instantaneous action is not indicated, she may wisely spend a little time in reassuring the patient and in quieting his fellow workers, of course not delaying to summon surgeon or ambulance as may be required. If surgeon or ambulance are delayed, as is sometimes unavoidable, the nurse must plan for further necessary care of her patient. If he can be moved the nurse can often get him to the hospital, using some available conveyance. Much will depend on local conditions and on other surgical aid within reach. It is well, in the beginning, to have an understanding with employer and company surgeon so that, in case the company surgeon cannot be reached, the nurse may be free to do her best in getting for the injured worker the care needed without red tape or unnecessary delay, that whatever action she is obliged to take will have the support of the company and of the company physician.

The nurse will not forget to see that the proper persons are notified, the company physician, the hospital, the main office and the manager.

The next duty of the nurse, and requiring tactful treatment, will probably be to notify the relatives of the injured one. This must not be left to the excited and garbled reports of neighbors. If the nurse is unable to visit the home of the worker herself, she should, before the closing hour if

possible, send a trustworthy, sympathetic and tactful person with full instructions as to just what to say. No effort should be spared to give the friends the exact truth and a careful statement of what has been done for the welfare of the patient.

The third duty, after a serious injury or one whose cause is not clear to the nurse, is a visit to the site of the casualty. If the employer allows the nurse to follow up these cases, she will add greatly to the completeness of her records and to her intelligent understanding of her work.

The industrial nurse working, at times, without the immediate presence of the doctor will do too little rather than too much in the handling of those cases of disability which do not seem to have their origin in the conditions of employment. She will, of course, make no diagnosis, will wisely be slow in judging the relative seriousness of seeming trifles, and will not be too ready to administer even those remedies approved by the doctor unless he is present to observe the patient. A gargle for the throat may destroy the evidence of diphtheria for some hours. A medicine for the relief of headache may mask important symptoms. Frequent doses of cathartics may form the habit of depending on such remedies. The nurse should do all she can for these people by teaching them that regular habits and suitable food will do more for them than drugs. If drugs are continually necessary expert medical advice is indicated.

In most plants patients, other than those injured in the course of their employment, are, when in need of medical or surgical care, referred to their private physicians. It would, therefore, seem best to limit strictly the giving of medicines in the first aid room to those needed in emergencies.

Indispositions which are not relieved by rest and heat, headaches not helped by rest and an ice cap or hot-water bag, or any illnesses accompanied by fever have no place in the first aid room unless a doctor is in attendance to take all the responsibility. The industrial nurse must see that the patient is placed where he will have care; at his own home, at

a hospital, or even at a friend's house, and arrange for medical attention. Patients should not be sent home unless the nurse is sure that some one will be at hand to give the necessary care. When the industrial nurse has little time for visits, the local visiting nurse association will often coöperate in the care of such patients, and the help of neighbors is not to be despised. It is often an advantage for the nurse to accompany these patients home, but in any case an intelligent person should go with a sick patient. An automobile for the use of the nurse is of great help in getting sick persons out of the plant, and it can be used instead of an ambulance for many hospital patients.

Patients sent home should be followed up by the nurse to insure proper care and to prevent the spread of possible contagion.

Patients coming to the first aid room repeatedly for seeming trifles should have careful watching. A study of the record of a worker sometimes reveals a surprising number of hours spent in the rest room. Examination by the physician will often reveal abnormal conditions which may be corrected or which may be relieved by change of work. The industrial nurse should be prepared to give simple eye tests, thus being able to prove to the worker his need of the attention of an oculist and to prevent his employment where normal vision is indispensable.

Hysteria, if frequent or not explainable by some recent strain, should also have careful medical attention. Young girls, suffering excessive periodical pain are often the most numerous applicants for relief. Nurses can do much for some of these girls by coöperation with a local hospital having women physicians on the staff.

Much preventive work is possible in the first aid room. Cases presenting the early symptoms of cancer, tuberculosis and mental disturbance will be seen by the nurse, not to mention those showing the often indefinite warnings of other approaching illnesses, excessive nervous strain and over-work. Recognition of these symptoms by the nurse will lead

to consultation with a doctor before more serious conditions have time to develop. In order to understand many of the cases the attending doctor must have a knowledge of home environment and outside activities, and the industrial nurse should do her part in getting this information before him.

No matter what the origin of the troubles which bring the workers to the first aid room, the removal of the cause is only delayed by the promiscuous administration of drugs. Something is wrong, either in the health or habits of the worker, in his work itself or in his surroundings or associates. It is the nurse's business to discover the cause, whether late hours or a poorly planned diet, approaching illness, work which strains poor eyes, an unhappy home, a nagging foreman or what not. Repeated visits to the first aid room cause much loss of time to worker as well as to employer, and both will gain if the nurse can help the worker to a better adjustment to his surroundings. He should be encouraged to solve his own problems. Sometimes he may need a good deal of help, but the more he is given the moral courage to do for himself, the better for him. The workers must not be led to depend too greatly on the nurse in any matter. It is easy to make some people so dependent on the will of others that they become unable to make the simplest decisions for themselves.

Toothache is a common first aid room complaint. The patient wants relief but he seldom wants to go to the dentist. As the giving of remedies simply postpones the cure, it seems better to have at hand no remedies at all for toothache and to insist on each patient going at once to a dentist. If the employer provides the services of a dentist, his relation to these cases is the same as that of the company physician to the medical and surgical cases. Where no such service is at hand the nurse must depend on coöperation with the local dentists. If it is not possible to make a dental appointment or if the patient cannot leave his work, it may be desirable to make some application for the relief of pain, but the oftener this is done the greater the difficulty in getting all patients to have their teeth put in order.

Workers, and others who should know better, sometimes ask impossible services of the nurse and may even accuse her of lack of sympathy when she refuses them. Much tact and patience are needed in explaining the relation of the doctor and the nurse, and it sometimes takes much persistence to persuade the patient to consult the doctor when he has expected the nurse to cure him. The absolute difference between the training, responsibility and duties of physician and nurse must be explained again and again to the worker and to his friends. No matter how isolated the nurse or how far from a doctor, the nurse must keep this distinction in mind and must strictly limit her ministrations to the minimum necessary for the well-being of her patient until the necessary medical aid can be obtained.

The control of contagion must, in times of epidemic, be considered by the nurse. In a large plant, efficient control will depend quite as much on the coöperation and intelligence of the foremen in the work rooms as on the doctor and the nurse. An outbreak of "pink eye" may reach alarming proportions in a short time, or an epidemic of influenza may spread until the plant must be closed unless each worker is closely observed each day and all who show symptoms of illness are excluded from the plant and so cared for outside that they are not likely to infect others.

All employés having the direct oversight of others should be taught to recognize the symptoms of "colds," which are so often the first symptoms of the infectious diseases. They should be made to realize the importance of having the physician see such cases in order to prevent the exposure of others to a possible danger. With the physician in the plant, the responsibility for the control of contagion rests with him, but where, as in many plants, the physician attends only to industrial accidents, the nurse will have a heavy responsibility. Until the employer is convinced of the advantages of more careful *medical* supervision in the plant by a physician, the nurse will often depend for coöperation, in the prevention of contagion, on the support of the local health

department and on the help of the private physicians of her patients.

In a very small plant the nurse may, in times of epidemic, be able to see each worker daily, take his temperature, observe his eyes, nose, mouth and throat, and exclude, before he enters the work room any employé showing suspicious symptoms. In most plants, this plan would be impossible and, if any regular inspection were made, it would have to be done by persons instructed by the nurse. Workers showing symptoms of illness would then be seen by the nurse and sent to their family physicians, or other arrangements made for their care.

Aside from the cases of physical disability already described, the industrial nurse will be consulted in all sorts of social questions. Unless the nurse can pass these people on to a trained welfare worker she must do all she can to help them. The very fact that she has helped them in their illnesses makes them prefer her help to that of others in their other troubles. A nurse who is allowed to handle these cases gains another point of mutual interest and if she has prepared herself by a study of social questions, both nurse and patient will benefit by this different contact.

Mothers having children to support may need to be told how to secure a mother's pension or require help in getting support from a deserting husband. Men and women may need to change their boarding places. Workers suffering from tuberculosis will need to be informed of the means available for their treatment and to be assured that their families will not suffer from the idleness of the bread-winner. Foreigners will want to learn English. Young people will ask about evening study. A parent whose child is employed by the company may be anxious as to his future, may think there is reason to distrust the influence of some fellow employé. Almost any social question may come up. While the industrial nurse will not have time to go into the business of looking up deserting husbands or holding night schools, she should know if there are local agencies filling these needs.

If no agencies exist she should store all facts in her records and be ready, if she has a chance, to present reasons for the establishment, in the community, of what is needed.

The unmarried pregnant woman in industry is sometimes, although not so often as is commonly supposed, a problem requiring the attention of the industrial nurse. Here she will have need of all her sympathy, understanding, resourcefulness, tact and even courage. The girl's associates and family, the mother to be and her baby, the guilty man or perhaps ignorant boy, the girl's own character, must all be considered. This is no place for the usual records and reports, although, if conditions of the industry have any bearing on the possibility of such occurrences, the nurse must recognize her responsibility in prevention by making a prompt, frank and detailed report to the person or persons most likely to be able to change the conditions. Unless she is permitted freedom in helping the workers in their personal affairs the nurse can be of little lasting comfort to the girl, but she can at least make her departure from the plant as inconspicuous as possible and she can give the girl the assurance that every one will not condemn her wholly. Whether the man should marry the girl is an open question. Some girls refuse to see him and scorn his support. No one has yet made any rules for helping these girls. Those who are not essentially immoral often bear their own burdens and are unknown to the agencies which exist for the care of "fallen women." Any public health nurse of long experience must know more than one unfortunate mother who has supported herself and her child and who has forced her neighbors to respect her. Aside from the mentally deficient each case presents a different set of factors and must be handled differently from any other case. The mentally deficient girl should, of course, be segregated if there is any way to do it and the nurse has a responsibility in seeing that this is accomplished.

If the girl can be persuaded to tell her mother and if the nurse can make sure of the mother's understanding and sympathy, the girl's future will often be safest in her hands.

But many mothers are far from gentle with the daughter. A girl may find her own solution. During pregnancy she usually thinks she will hate the baby but, if she has the care of it, she is pretty sure to love it. The industrial nurse discovering such a girl cannot do less than encourage her as much as possible and help her to go through her pregnancy and keep her child. It is seldom comfortable for the girl to return to her former place of employment.

As the efficiency of the first aid room becomes evident, the work will become more closely related to the other departments and the help of the nurse will be asked in other than first aid problems. As it is realized that the nurse has the confidence of the workers she will be asked to handle all sorts of delicate and confidential situations for their benefit.

For the convenience of the workers in consulting the nurse about their personal problems, the first aid room should be open during the noon hour. This time should be kept, as far as possible, for the workers themselves and should not be used for routine work in the care of industrial injuries, which can be done during working hours. The nurse must not neglect to set aside some other regular time for her own luncheon.

While the workers' temptations to make needless visits to the nurse are not great, unless the company allows pay for time spent away from work rooms, care should be taken that justice is done the company and that no one is pampered. Idle machines plus idle workers mean a large loss. Where time is allowed the workers to see the nurse on their own errands, feelings of honor often prevent imposition and the privilege is valued and seldom abused. The nurse's office and the rest room are not charitable institutions, hospitals, or places of amusement. Patients who are really ill should be taken, as soon as may be, where they can have care. The few who come to the nurse for change of scene should have short shrift.

There is also the question of the nurse's own time. It is easy to fritter it away in unavailing conversations. The

precious and all too short noon hour may be wasted on the curious or on the self-centered individuals who love to talk about themselves. Fortunately the latter class is small among those who work with their hands. In trying to weed out the unprofitable conversationalists, the nurse must not forget that she can learn much by listening and that even gossip, carefully checked up and remembered but not repeated, may be a valuable factor in her usefulness to others.

Personal instruction in hygiene to individual workers may be carried on almost continuously but with any large number of employés this kind of teaching does not reach far. Some firms are willing to have short talks given during work hours in the work rooms. If adapted to the intelligence of the workers this is a good means of spreading knowledge. In a small town evening classes are sometimes possible, but without assistance, the time and effort necessary are too great a tax on the strength of the nurse. Sometimes the company doctor will carry on such a campaign of education.

Where assistance can be had, the noon hour offers valuable opportunities for the education of the workers. A talk by a dentist one week, one by the company doctor another week, a talk to women, one to girls, a lecture from a baby specialist, lessons in the home care of the sick and numberless other subjects will interest the workers and give them something that will be of practical help to them in their daily lives. In some plants instruction is provided by the workers themselves through self-managed clubs. With a leader, such a club may be made practically self-supporting and will hold the interest of its members better than voluntarily attended and unorganized classes. Coöperation with schools, health board, Young Men's Christian Association, Young Women's Christian Association, will sometimes provide needed instruction outside the plant as well as during working hours. Here the temptation will be to use time for the benefit of others which is sorely needed by the nurse for her own rest, recreation and development. Efficiency is best preserved by keeping "fit" mentally as well as physically, and no one can

do this indefinitely whose life holds no place for the independent pursuit of relaxation, pleasure and inspiration.

Some firms expect the nurse to teach the workers first aid methods. If the employés are expected to use what they have learned in the care of their fellow workers, time is usually allowed during working hours. Should the responsibility of the workers in the care of injuries be beyond the direct control and constant supervision of the nurse, wisdom would suggest that some other person give all instruction and assume all responsibility for the work of these lay-persons. A nurse is fully justified in refusing to be responsible for more than she can closely supervise. Workers trained in first aid are sometimes careful and trustworthy, but they are too prone to take chances, to underestimate the gravity of an injury and to be a continual source of anxiety.

The industrial nurse will sometimes find that she has a number of points of contact with legal matters. In states without smoothly working compensation laws, she may be called as a witness in the settlement of claims for compensation for industrial injuries. Proper behavior in this event consists in giving direct replies to direct questions while under oath and in making no comments on the case when not on the witness stand. If a question is not direct or is not understood no answer should be made until the judge has said that the question is in proper form. The witness stand is no place for conjecture. A prompt and exact statement of facts by the nurse in her records may be the means by which a just decision is reached.

In many plants the nurse has a large responsibility in carrying out the provisions of industrial laws. Her employer may expect her to take charge of accident reports. If she has any relation to the employment office she will probably be responsible for seeing that other labor laws, especially in regard to the employment of women and children, are carried out. If she is expected to inspect the plant, her employer may depend on her to bring to his attention any violation or evasion of laws for the safety and sanitation of

industrial plants. To meet these responsibilities, and even for intelligent daily work, the industrial nurse should make herself familiar with the laws of the state in which she is employed which affect industry, the laws controlling the employment of minors, the work of women, the minimum air-space requirements per person, the provision and use of seats, the precautions required by law in the dangerous trades and any other matters directly affecting workers.

CHAPTER VII

THE FIRST AID ROOM:—LOCATION, PLAN, EQUIPMENT, ETC.

The importance of a conspicuous and accessible location for the first aid room will be appreciated by any one who knows the average worker and his frequent lack of observation as to his surroundings. Where the plant is in one building or in a compact group of buildings one first aid station may be all that is necessary. This is the ideal arrangement. In plants where several stations are needed a nurse in each would make for safety, but we cannot always have the ideal and good work must be done with the facilities at hand. The first aid room or rooms should be so located as to be within sight of the workers as they go to and from their work and should be in as central a situation as possible, equally accessible from all parts of the plant. The main room at least should be where it can be kept open at the noon hour. There should be room for present needs, and future developments are usually easier where some thought is taken for growth. It is unwise to change the location of the first aid room, as familiarity of the workers with the place is a large factor in their willingness to use it freely.

A waiting room will be needed and an office for the nurse where she may talk privately with those who ask her advice or who may have been sent to her for help. Surgical dressings and assisting the doctor are but small parts of her work, and unless the workers are sure that they will be able to see the nurse without the presence of a third person, she will lose her most valuable opportunities to aid the workers, the doctor and the employer.

A small surgical dressing room will also be required, and a room adjoining, where dressings which might embarrass the

patient may be done, is convenient. If space is limited, the nurse's office might be used for such work. Beds or couches are needed and they are often placed in the dressing room, a bad arrangement where the work is at all heavy. Patients who need to lie down should be quiet, and this is impossible if no special rest room is provided. Even though the waiting room must be sacrificed, patients waiting in the hall, an effort should be made to set aside one room for rest and quiet. Two rest rooms, one for men and one for women, are desirable. In order that any seriously injured person may be sent away without confusion, a separate screened exit with a drive for an ambulance is a convenience. A clothes closet and locked cabinets for records should not be forgotten. A small cabinet in the dressing room may be used for open cases, the cards being transferred to large cabinets in the nurse's office.

It is true that the nurse must often manage with one room and may possibly need no more space, but, as four rooms and a waiting room are so desirable and suit the needs of so many plants, the fitting up of such a place will be considered.

If the plant spreads over much ground, several first aid stations may be required. In any case, but one main station with four rooms will be used, unless in a very large plant with many nurses. The centralization of work, records and supplies in the main first aid room means economy of time, labor and expense. If found absolutely necessary others may be opened in remote parts of the plant. These outlying stations should be as simple as will suffice for the needs of the part of the plant which they are to serve.

A nurse, working without assistants, must branch out carefully lest she find herself with more than she can properly supervise. Often the staff must grow before the work can be increased. By slow development, reconstruction and unnecessary building may be avoided.

In one plant there is a large station, such as has been described, and a smaller room at the other end of the grounds. A

clerk, who has been trained in the simplest first aid methods, spends her time in the larger station, keeping all the records for both rooms, attending to the supplies and sometimes giving first aid when the nurse is in another part of the plant. At the other station, a worker near by keeps the key, knows how to give very simple first aid and is able to stay with the patient until the nurse can be summoned. The nurse can always be reached by telephone. She spends her mornings and noon hours in the main station and goes to the other room when needed. She is provided with an automobile.

Another plant has a large station, where the greater part of the work is done and where records and supplies are kept, and twelve smaller rooms in different parts of the plant, each in the care of a near by worker who has been trained in first aid. The nurse is consulted by telephone when her advice is needed. She visits the rooms for inspection at regular intervals and in case of serious injury but, whenever possible, injured workers are sent to the main station.

Often small cabinets with first aid materials are placed with responsible persons through the plant. It is easy to carry this too far, thus defeating the purpose of the first aid organization, which is to give each injury, no matter how small, the protection of skilled nursing care. Supplementary first aid stations are useful in providing a place for an injured worker to rest while help is being summoned and in making available a supply of sterile dressings with which wounds may be covered while the patient goes to the doctor or to the nurse.

In connection with the future growth of the main first aid station, the nurse may give thought to some or all of the following lines of progress:—Rest rooms for all workers for the noon hour, lunch rooms, roof garden, recreation hall, circulating library, drying rooms for wet clothes, wash rooms, baths, counters for the loan or sale of umbrellas, rubbers, stockings, dry skirts, and in the food trades especially, a manicure service and freshly laundered uniforms for the workers.

If the industrial doctor spends his entire time in the plant, the extension of the work often demands space for X-ray rooms, laboratories, offices for various specialists, and for dentist and chiropodist in addition to the doctor's own offices. Where there is such a medical department the planning will of course be done by the industrial physician. In any case the nurse will do her work more efficiently if she has in addition to the equipment at hand, her own private office, no matter how small.

However conspicuous the site for the first aid room may be, a number of signs and pointing arrows will be needed to make plain where the place is and what it is for.

In planning the partition of the space allowed, care should be exercised that beds and stretchers may be easily moved where needed, that doors are wide enough and that narrow stairs and sharp turns do not make it difficult to move an injured person. If it is possible to have all partitions extend to the ceiling, much daily labor of dusting will be saved. Careful cleaners for such work are hard to find, and add to the expense of the department. A little additional cost in providing smooth doors and walls and in avoiding dirt-catching corners and ledges will be repaid in subsequent saving of labor. The standards of cleanliness in the most sanitary factories are seldom those of a hospital, and some men are apt to think a nurse unduly particular. Care in planning will save much difficulty later on in keeping the first aid room in proper condition.

Plumbing.—The minimum amount of plumbing for a first aid room should include an abundant supply of hot and cold water, a large stationary sink or basin and a toilet. A slop sink should be provided unless there is one near by. In addition, a small stationary hand basin in the toilet room and a stationary foot tub which may be screened off are almost necessities where much work is to be done. A bath tub and a shower are greatly appreciated conveniences. A pressure sterilizer will save large sums in the purchase of sterile dressings and will eventually pay for itself unless con-

venient, economical arrangements can be made with a hospital for the sterilization of supplies. Live steam which is usually available in manufacturing plants can be utilized for the sterilizer. Gas, oil, alcohol or electricity may be substituted, but all require careful watching, which is often impossible when one nurse is responsible for the first aid in a large plant.

Walls and Floors:—While tiling is the ideal wall and floor material, the expense is often prohibitive. A hard maple floor scrubbed daily or a battle-ship linoleum cemented down will answer if care is taken that joinings fit tightly and that there are no crevices at the edges for the accumulation of dirt. The walls may be painted with a hard-finish, washable paint. An oilcloth covering is manufactured for walls which lasts well and is easily washed. It should have careful fitting for, unless well applied, it frequently becomes loose at edges and corners. As white is trying to eyes, buff or French gray color will prove restful. If the light is poor, white may be better.

Even though an unsuitable corner must frequently be used for the nurse's headquarters, no effort should be spared to make it, as far as possible, an example of cleanliness and neatness.

Decorations:—Decorations seem out of place in a first aid room. A few clean, thrifty plants will make the rooms as attractive as though elaborately provided with pictures, hangings and rugs.

Furniture:—The number of workers, men and women, and the hazards of the industry, as well as the space available, will determine the quantity of furniture required. In a single room, a writing table, a cupboard, two stools (one high and the other of chair height), a dressing table, two chairs and a couch may be all for which there is space or need.

The furnishing of the group of four rooms, already described, will be considered. The lists following have been found satisfactory in industries accompanied by minor

hazards and employing from five to eight thousand workers, with industrial physicians doing most of their work in their private offices but coming to the plant in case of serious injury.

For the waiting room, chairs or benches may be chosen. Benches fastened to the floor are thought less noisy and may be less expensive.

The nurse's office should have a desk and two chairs and the required filing cabinets. A clothes closet should be in or near the office.

The dressing room should be furnished with a writing table, a glass covered dressing table, a stool of chair height, a high stool, two chairs and a wall cabinet with shelves.

A two-burner gas plate is less expensive and more practical than a regular instrument sterilizer. It should be placed on a metal and asbestos-covered shelf of convenient height and the wall behind should be protected in like manner. As matches may not legally be kept in factories in some states, patent friction lighters should be provided. Unless a doctor spends his whole time in the plant, such a stove is all that is needed for the preparation of sterile water and solutions and for the boiling of instruments and utensils.

One of the stationary wash basins should be placed in this room and, if possible, set so that the nurse can stand between it and the dressing table, the table being on her right and the basin on her left. She will then be able to wash her hands when necessary without stepping from her work. When one nurse must often bandage fifty or sixty fingers in a short time, no saving of time or strength is too small to be considered, if she is to have time for any of the other work which should be done.

For the rest room, many firms provide low wicker couches with pillow and blanket. These are comfortable when workers are allowed to rest in the room but are not suitable for the care of injured or sick persons even for a short time. Two hospital beds of proper height and provided with mattresses, pillows, sheets, pillow covers and blankets add

greatly to the comfort of both patient and nurse and will be used daily in any large plant. Where economy of space need not be considered, two rest rooms or even three are sometimes provided. One room is furnished with couches for women who need only rest, one is provided with beds for the sick or injured women workers and another for men. The rest room with couches might well be for the use of women wishing to rest during the noon hour. Men usually scorn a couch unless sick enough to require care. One room is often made to serve for both men and women by the use of screens. If one of each sex is injured at the same time, it is usually easy to send the one less seriously injured to his home or elsewhere.

If expense need not be too carefully considered, the regulation, white enameled hospital furniture is usually purchased. However, a large sum need not be expended. Many large plants maintain carpenter, glazier and paint shops. Often articles can be made and painted in the plant. Kitchen chairs and tables and cheap office stools, painted white, look well and are easily cleaned and refinished. A search through the plant will sometimes reveal discarded furnishings which, when painted, are more convenient than any that could be purchased. A kitchen table painted and provided with a glass top answers for a dressing table. A large bathroom cabinet will take the place of an expensive one from a surgical supply house. A four-leaf clothes horse, painted white and provided with heavy muslin covers tied on with tapes, makes a neat and useful screen. A small pine stand will make a good bedside table. French gray paint is attractive for all except the dressing room furniture.

In planning the furnishings three lists will make plain to the management the relative advantages of each class of articles. One list should be of regulation hospital furnishings, the second of cheaper substitutes and the third, of those articles which could be made in the plant. The first two lists should contain the approximate cost of each article and when submitted to the head of the carpenter and paint shops he will be able to quote the comparative costs of home-made

articles. The three lists may then be submitted to the person having charge of the purchasing department, or to the manager, for decision. Sometimes the nurse is asked to do the buying and in other plants, a certain sum may be placed at her disposal and as long as she does not exceed her budget, she is free to use her own judgment. In any case a knowledge of cost is valuable and is easily acquired from catalogues. No prices are given here as conditions change so rapidly that they would be of no permanent value.

Shades and Curtains:—Few hangings of any sort are needed and they should be avoided wherever possible. Straight muslin curtains are attractive if frequently laundered, and protect the rooms from prying eyes. Shades may be necessary for this purpose and as a protection from direct sunlight. Dark shades are advisable in the rest room and, if an eye specialist attends patients in the plant, a way of darkening the room in which he works should be provided. A regularly attending oculist would, of course, plan his own quarters. Shades should be of glazed holland or similar material and should be taken out of doors and dusted at regular intervals.

Utensils:—Bowls, basins, trays, etc., may be of white enamel, earthenware or glass. If handled carefully, earthenware or glass last longer than enamel. A good supply of small utensils is an economy of time where the work is at all active. Fingers may be put to soak while patients are waiting, and freshly sterilized bowls may be kept ready in sufficient numbers.

The following list of utensils has been found ample for a very busy first aid room.

- 2 teakettles, one for hot and one for cold sterile water.
- 1 large fish kettle for sterilizing small utensils and for the surgeon's instruments.
- 1 small covered basin with a handle and wide enough to hold the nurse's instruments.
- 1 pitcher (2 qt.) for mixing solutions, etc.
- 1 pitcher (1 pt.).

- 2 hand basins.
- 6 bowls (1 pt.).
- 3 bowls (4 qt.).
- 1 covered jar for dressings.
- 1 covered jar for sponging cotton.
- 1 irrigating can and tube.
- 1 mug ($\frac{1}{2}$ pt.) for keeping the points of fresh instruments sterile in solution.
- 1 mug ($\frac{1}{2}$ pt.) of another color or shape for used instruments.
- 1 measuring glass (500 cc.).
- 6 small medicine glasses.
- 6 tumblers.
- 6 spoons.
- 2 clinical thermometers.
- 1 thermometer for testing solutions.
- 3 cups, plates and spoons. A sick or injured person is often benefited by a small lunch. Food is not a common first aid room need but it should be possible to give a little nourishment, when that is what the patient needs.¹
- 2 trays for carrying dressings to the rest room.

Instruments.—Few instruments are needed by a nurse. If cases requiring surgical care are treated in the doctor's private office or sent to a hospital, the only instruments required are for handling gauze, removing splinters and for carrying out the doctor's orders in the cases which he sends for redressings, possibly a probe and a grooved director for inserting drains under the orders of the surgeon. If the doctor does actual surgical work in the first aid room, he will order his own instruments and the nurse should keep them apart and allow them to be used by no one else. A good

¹ Where there is no lunch room in the plant, a little coffee, malted milk, a can of evaporated milk and a few crackers, purchased by the nurse, will make it possible for her to make an occasional patient feel that he has been looked after in every way. A worker who has eaten no lunch should not be sent home after even a slight injury if he is faint and hungry.

supply of forceps and scissors should be at hand in a large plant. In some small plants a nurse might easily manage with one instrument of each kind.

With frequent sterilizations, the following list will answer for a first aid room caring for from fifty to a hundred dressings a day:

- 1 large spatula.
- 1 small spatula.
- 6 small, straight, pointed scissors.
- 6 small dressing forceps.
- 2 splinter forceps.
- 3 probes } for redressings sent to the nurse by
- 3 grooved directors } the doctor.

Drugs.—As the industrial nurse, working often without the immediate presence of the doctor, even though under his directions, may be subject to misunderstanding, she should protect herself from unjust criticism by limiting her supplies so that it is quite clear she cannot possibly take upon herself the physician's duties.

Aside from supplies specially ordered by the doctor, the following list of drugs¹ has been found ample in several large plants.

- Boric acid.
- Essence of peppermint.
- Jamaica ginger.
- Aromatic spirits of ammonia.
- Oil of cloves. (Of doubtful utility.)
- White wine vinegar.
- Bicarbonate of soda.
- Castor oil.
- Tincture of iodine 7%. (To be diluted to 3% or less before using.)
- Alcohol.
- Bichloride of mercury tablets. (Not an absolute necessity.)

¹ Alcoholic stimulants have no place in the first aid room unless by the express wish of company physician. Coffee should be available.

Colodion. (For use in sticking down rough edges of finger dressings, not for sealing dressings or application to wounds.)

Benzene or gasoline. (For removing plaster from the skin.)

Carbolized vaseline. (For chapped or rough hands which interfere with work.)

Boric acid ointment or other burn ointment in *large* quantity.

Soda bicarbonate ointment (3%).

Some cathartic pills or fluids are usually provided with the advice of the doctor, but their use should not be encouraged.

A hypodermic case and certain stimulants are left with the nurse by some doctors, but they may usually be dispensed with. Unless the plant is at some distance from a doctor external heat will answer in most cases until assistance can be summoned.

Antidotes to any poisons used in the industry should be at hand. An emetic or a tank of oxygen may sometimes be needed. The doctor should assume the responsibility for saying what drugs should be at hand, except home remedies and simple antiseptics and disinfectants which might be found in the medicine closet of any careful housewife.

After consultation with the company doctor, provision must often be made for the treatment of pediculosis, ring worm, scabies, etc. Children who have to work seldom have homes where such treatment is properly carried out. They are usually sensitive about their condition and a nurse will gain their confidence best by quietly helping them. When they know what proper treatment is, they often apply what they have learned in the treatment of the whole family.

Dressings:—It is practically impossible to purchase sterile dressings which may be used in industrial first aid rooms without waste. Gauze should be purchased. Bandages are cheaper when bought than when made in the plant. Sterile bandages are unnecessary, and the plain cut gauze bandages are much cheaper and serve as well as those which are torn

or cut to thread and elaborately wrapped and sterilized. Instead of absorbent cotton, by-products may sometimes be utilized in the textile industries. In cotton mills, waste may be boiled in soda and well rinsed at the bleach house, then sterilized in the first aid room for use in cleaning wounds and wherever absorbent cotton would be used. If run through a carding machine, it will be easy to handle, very absorbent and will look nearly as well as the cotton manufactured for surgical use. If a hundred pounds are prepared at once, the labor is very little and the supply will probably last several years. Heavy muslin makes good dressing covers.

A box shop is a convenience found in many plants. Gauze may be cut there. This means a great saving of time and the product is perfectly suited to first aid and to many other dressings. Two sizes are useful, two inch squares and four inch squares. The smaller size is just right for finger dressings and many other uses and the larger size, with a few yard length rolls, some half yard squares and cotton will be all the dressings that can possibly be needed.

Other Medical and Surgical Supplies:—In addition to those already mentioned, a well-equipped first aid room will be supplied with the following articles:

Splints of light strong board for leg, arm and thigh.

Bass wood splints, wooden tongue depressors, applicators and tooth picks.

Paper bags or newspaper for wrapping soiled dressings.

A sanitary trash can.

Eye cups.

Medicine droppers with red bulbs.

Medicine droppers with white bulbs.

Tourniquet. (In plain sight, always in the same spot and frequently tested.)

Sugar.

Salt.

6 fruit jars with clamped covers for drains, swabs, etc.
($\frac{3}{4}$ pt.)

Slings. (May be made of cheap unbleached cheese cloth.)

Adhesive plaster. (When rolled on metal spools the cost is much greater than when protected with muslin and the latter is nearly as convenient.)

Ice bag.

Hot water bag.

Stomach and rectal tubes.

Stretcher. (One that can be used as a cot.)

Hand brushes.

Pins (straight and safety). Tied bandages are an economy.

Platform scales.

Linen.—An amount of linen must be provided according to the size of the plant. In one plant with from five to eight thousand employés, where the laundry was done weekly, the following was an ample supply:

3 dozen sheets. (Sheets are used instead of bed spreads.)

2 dozen pillow cases.

12 dozen hemmed huck squares, about 9 inches square, for hand towels

2 dozen dressing towels, to be sterilized.

2 washable laundry bags.

1 blanket for each bed or cot.

Rubber sheets and pillow covers.

Laundry bags of ticking 1 yd. by $1\frac{1}{2}$ yd. when finished, provided with a slit halfway down the middle of the front, four large metal eyelets in the upper edge matching four hooks on toilet or bathroom wall near a window, are neat and practical. As laundry work will probably be sent out only once a week, great care must be taken as to the condition of articles placed in the bag. Hotels and department stores and food industries usually maintain laundries, and textile mills have bleaching rooms where soiled dressings and towels may sometimes be washed. Dressings to be burned should be sent to the furnace in a firm bundle.

Sometimes necessary sewing may be done in a sewing room connected with the plant. Thread mills have testing rooms where each lot of thread is tried on sewing machines and where, incidentally, sewing is wanted. Hotels, depart-

ment stores and clothing industries have people to do sewing. A nurse's thoughtfulness in finding out how she can use what is at hand in the way of such help will usually be appreciated.

In fitting up the smaller first aid stations, the equipment should be simple and fitted only to the needs of the particular part of the plant to be served. A careful study of the hazards will show that suitable forceps are needed when workers may have splinters or needles break off in their fingers; where poisons are used in the plant there should be antidotes at hand, and some one on the spot should know what to do in case of injury. (Chemists are employed in many industries and they sometimes have this matter in hand.) Other needs should be considered, such as poisonous gases, electric currents, caustic alkali and acid which may cause burns, particularly eye burns. The industrial doctor must be consulted until all these danger points have been covered.

It is impossible to describe all the hazards in industry. Employers and state and federal departments and safety organizations are working for the decrease of danger. But it can never be entirely abolished. When the machinery is as safe as it can be made employees still cause injury to themselves and to others by carelessness or blundering.

In keeping the smaller first aid rooms supplied with the necessary articles, a system of regular inspection is essential, or supplies will disappear or be tucked away and not be found when wanted. Some one person must be held responsible for the condition of each station. A list of articles with the places in which they are to be kept will aid both inspector and the person responsible. The following list has been used in supplementary first aid rooms where the needs were of a general nature:

Top Shelf:—Splints.

Paper bags or newspapers (for wrapping soiled dressings.)

1st Shelf from Top:—

Jar of cotton.

3 packages of sterile gauze (2 in.)
 3 " " " (4 in.) } In original muslin
 3 rolls " " (1 yd.) } covers.
 1 package " " swabs (small)

1 eye cup.

1 eye dropper with white bulb, boiled and in boric solution.

Boric acid solution.

Tourniquet, extreme right in plain sight.

2nd Shelf from Top:—

Cup and saucer, spoon.

Sugar. (May be omitted.)

Salt.

Essence of peppermint.

Jamaica ginger.

Aromatic spirits of ammonia. (Rubber cork.)

Oil of cloves. (May be omitted.)

White wine vinegar.

Castor oil. (Sterilize after using and seal for next time.)

Small measuring glass.

3rd Shelf from Top:—

Tooth picks in covered jar.

2 slings.

Adhesive plaster.

Spatula (small)

Scissors

Dressing forceps

Splinter forceps

Large needle

Bandages { 6 one-inch.

Bandages { 6 three-inch.

Bandages { 3 four-inch.

Sterile and in original wrapper.

Bottom shelf:—

Tincture of iodine, 2% to 3%. (Tight rubber cork.)

Medicine dropper with red rubber bulb.

Benzene.

Carbolized vaseline. (For rough hands, not for wounds.)

Alcohol.

Boric acid ointment or other burn ointment.

Other articles:—

Towels.

Ice bag on proper hook.

Hot-water bag on proper hook.

Cotton for padding splints, etc.

2 sheets.

2 pillow covers

Blanket.

Stretcher.

2 hand brushes.

1 hand basin.

2 bowls (small)

1 mug.

Books for Reference, etc.:— For convenience a few reference books should find a place in the nurse's office. A directory of the plant containing a list of department heads, foremen, and other persons in authority with their telephone numbers, and in a large plant, a map of the premises will be required. A telephone directory and a street directory with a map of the town and a purchased or home-made directory of local social agencies, are essential.

A small professional library will be frequently consulted. Such books are often owned by the nurse and she will of course wish to possess what she needs for her own personal information and development. A work on industrial diseases, one or more books on first aid, especially with reference to methods of teaching the subject to laymen, bulletins of local, state and federal health and labor departments, especially those which treat of the health and accident hazards of the particular industry, a small manual of *materia medica*, a medical dictionary, will all be found useful and the list will be increased by any industrial nurse who gets a vision of her opportunities and prepares herself to grasp them.

A few elementary books on personal hygiene, practical dietetics, child care, first aid in the home and kindred subjects, if provided by the company, may be profitably used as a loan library. Workers may be interested, while a dressing is being done or other service rendered, and will often be glad to read a practical book on the subject of their needs.

The nurse's office also seems the logical place for the nurse's own professional periodicals. The Survey, The Public Health Nurse, and trade journals dealing with questions of sanitation and safety.

There will be little time for real reading but points may be looked up when necessary, the journals may be taken on necessary car trips and the total value will amount to an appreciable sum.

Economy in the Use of Supplies and in other Expenditures: For her own self-respect and for the example she unconsciously sets for those who watch her work, if for no other reasons, the industrial nurse will employ every means possible in the economical use of supplies and in keeping the expenses of her department at the lowest point consistent with efficiency. Most firms, even though liberal in providing not only what is needed but all that is desirable, keep careful account of the actual cost of each department and the amount of overhead charge of each, compare these costs from year to year, consider the work done, and the results accomplished. The total cost of the work is also divided by the number of employés, thus showing the average cost per worker. Such figures are often exchanged by employers who take great interest in comparing costs and results. Of course many of the nurse's best results are intangible, but many of them are reduced to black and white in statistical departments. The systems of statistics differ in different plants so that estimates of the cost of very similar service have been seen varying from \$.50 to \$2.50 and even \$5.00 per year per employé. Of course in small plants the cost is relatively more than in larger ones. One of the reasons that many small employers give for not establishing industrial nursing is that they cannot afford it.

It would seem that industrial nurses should be able to show, from their uniform results and by their uniform methods, that no employer can afford to do without industrial nursing.

Labor organizations and industrial relief associations are appreciating the value of industrial nursing both in the homes and in the plants and should show an increasing interest where it is known that industrial nurses are conservative in expenditures, as well as efficient in the prevention and relief of injury and illness.

Personnel:—Except in small plants or in those in which the duties required of the nurse are of a very limited nature, she will require some assistance from the very first. An intelligent young girl, who can be trained to do clerical work and taught the simplest first aid, will be able to keep the records, see to the general order of the station, assist with dressings and attend to the preparation and sterilization of supplies. She should be a person of some refinement and dignity as she will sometimes be alone and must be able to meet the workers in a pleasant way, but without encouraging unpleasant familiarity.

With the help of one clerk, the nurse should organize an efficient first aid service and establish a system of records, possibly doing a little home visiting, but surely learning the needs of the plant so as to be ready to meet them if she is given the opportunity.

A nurse's time is too valuable to be used in keeping simple records and in much of the other work which might as well be done by an untrained person. Where the workers are entirely men, these duties are sometimes assigned to a young man, but in most plants a woman or girl of the right type will be more satisfactory, will show more interest and will be less given to "skylarking."

A good deal of development and extension of work will be possible, without additional help, as the industrial nurse becomes accustomed to her duties and surroundings.

The further increase of the nurse's staff will depend en-

tirely on the wishes of the employer, the other welfare activities in the plant and on the ability and vision of the nurse herself. She may have, eventually, other nurses, additional clerks, a matron for the rest rooms, a lunch room force and others on her staff, but she may be sure that such growth will seldom be possible unless the financial advantage of each step is clearly appreciated.

CHAPTER VIII

THE VISITING NURSE IN INDUSTRY

The visiting nurse in industry is a logical development following the needs discovered by the industrial nurse in the first aid room.

An employé suffers an industrial injury and may not return to the doctor for redressing or to his work when he has recovered. The first aid nurse will be asked to look him up. She may see that he goes to the doctor. She may find that he is not able to do so and that she must ask the doctor to visit him. If he has recovered, she may find that he has gone to work elsewhere.

A patient is sent to the hospital from the plant. Report may come that he insists on going home, even though this will be dangerous. A visit from the nurse may show that she can easily relieve his mind about conditions at home or, if he is not satisfied in the hospital, she may be able to explain conditions to him, or even have them adjusted so that he becomes comfortable and contented.

A sick worker may be sent home from the plant and the nurse, not being sure of home surroundings, may consider it her duty to make a visit, even going on a holiday if she can find no other time.

The employer may ask to have pensioners visited. The mutual benefit association, though not employing the nurse, may request visits to those claiming benefit.

The employment department or heads of other departments may ask to have absent workers looked up. The nurse on her visit may find a sick person needing care and not knowing how to get it. She may discover a worker obliged to stay at home with a sick wife. She may find one, as the

writer did, who has lost his pay envelope and has no money for car fare.

The home visiting specially requested will increase as it is found that the nurse is able to be of real assistance.

Unless in a very small plant, the need of an assistant nurse will soon be evident. In many communities an automobile will enable one nurse to make fifty to seventy-five per cent more calls. As the nurse finds her way more and more into the homes, innumerable questions appear, in the solution of which she can be of more general help than a home visitor of any other training whatever.

Without intruding her presence, without much added expenditure of time and almost without realizing it she will be compelled, in addition to the definitely requested work, to enter more or less into the field of general public health nursing. Home conditions so closely affect the efficiency of the worker, and the work of the nurse is so valuable in changing these conditions for the better, that a hard and fast line between industrial and other visiting nursing is impossible.

Employers see that they must do something towards making our masses of foreign laborers into good American citizens. This can best be done through the homes and the schools and no one can enter the homes so naturally, serve them so well, or make herself so welcome as the industrial visiting nurse.

With a knowledge of the background, habits and superstitions of the workers in their homelands and a clear insight into the essentials of wholesome American family life, the visiting nurse is, according to the statements of many employers and others in a position to know, the most efficient single agent in the making of American citizens and in the promotion of mutual understanding in industrial relations. The industrial visiting nurse serves the employé while serving the employer in ways too many to enumerate.

Reaching the home, as she often does, before serious illness has appeared, and while the family life is at its normal state, she has a better opportunity than any other social worker

for assisting in maintaining or developing a home life where provision is made for the needs of normal existence; for health, education, employment, recreation and moral and spiritual inspiration.

By her friendship with people of many races, she learns the good in the life and habits of each and can assist in preserving, from other civilizations, much that should make our own richer. One of the surest ways of keeping a family of foreign birth united, happy and prosperous in the freedom of our republic is to impress the young people with the wisdom and good sense of their parents. The schools sometimes make an effort to do this, but their opportunities are not those of the nurse who understands the parents and is often able to persuade them to adopt the good in our life without entirely changing customs to which they cling.

Industrial efficiency depends so closely on a healthy happy home life that employers often send visiting nurses into the homes in order that regular instructive visiting nursing may be done as well as following up into the homes affairs which have had their origin in the plant.

There seem to be two general plans for the organization of visiting nursing service by industry. One is often employed in a small or backward community and the other in a large progressive town already supporting many social agencies.

In the former case, the employer may, through the services made available to his force, seek to foster and develop a sense of civic responsibility on the part of the community. Through the industrial visiting nurse's care of the employés, a demand for a like service for the entire population may be developed. In connection with the industry, dispensaries, hospitals, schools, baby conferences, prenatal care, visiting housekeepers, recreation centers and other social agencies in addition to a visiting nurse service may be available to the employés. They will all add to the well-being of the people. When the community realizes the need of any one of these agencies, the employer may well abandon the service and assist the community in establishing it, strengthening its

activities through his own coöperation, and that of his health department and his visiting nurses. In this way the employer becomes a strong force for the improvement of the general health and happiness of the community.

In large progressive towns, already provided with a visiting nurse association, baby welfare agency, and other efficient means for public health education, the employer often wisely limits industrial nursing activities outside the plant to a nursing service which will seek out the family of each sick worker and then coöperate with existing agencies for the care of the sick and the education of the family in habits of health.

After the first visit is made and the right contact established between the patient and the firm, a great saving of time and duplication of effort will often be made by arranging with the local visiting nurse association for the subsequent bedside care. The family is saved the unnecessary visits of numerous health workers and from what sometimes seems to the patient conflicting advice.

There is much discussion as to whether public health nursing should be general, each visiting nurse attending to all nursing in a neighborhood, or specialized, one nurse looking after the babies, another attending to the maternity cases, a third visiting the tuberculous patients. One method prevails in one locality, the other method in another locality. Whatever the wisdom of each course, the industrial nurse must always generalize. In so far as there are practical ways of coöoperating with other nurses, specialization may be possible, but the most efficient industrial nurse is one who is the "family nurse" of each worker in much the same way as a physician becomes a family doctor.

Where the industrial visiting nurse depends on the local visiting nurse association for bedside care of her patients, she should not feel that this relieves her of all responsibility for actual nursing work. When she finds something to be done, she will lose greatly in the estimation of those she visits if she allows the need to wait for the visit of another nurse.

She should always be ready to give actual bedside care. She may seldom require a visiting nurse bag but she should carry one, and keep it as well supplied and in as good order as would be expected of a nurse giving only bedside care. (This same bag or another like it is often useful for carrying about the plant for use in cases of emergency when the patient cannot be carried to the first aid room.)

Coöperation with the local visiting nurse association means the loss of some of the value of personal service to the worker and the resulting close personal contact. On the other hand, it aids in the support of a needed community agency and makes possible the nursing care of many workers without a great increase in the size of the industrial nursing staff. Such coöperation has been found useful in several cities. In some cities a charge of fifty cents a visit has been made and in others the firm pays into the funds of the visiting nurse association a fixed annual sum (ten cents in one place) for each employé on the pay roll.

An easy way of starting such a service for employés is to have the work entirely undertaken by the local visiting nurse association. The visits can be made by the nurses in their districts or by the association appointing one nurse to do the work of one plant, the nurse being responsible both to the firm and to the association. This plan has the advantage of assuring the continuation of nursing service in spite of changes of personnel, and offers supervision to inexperienced workers. Unless the nurse doing such work spends some regular time in the plant and becomes identified with it, there may be very little adaptation of the work to the needs of the industry and less of the close personal relationship which should exist between the nurse and patient, not because the nurse is a nurse but because, in addition, she is the personal representative of the company, or of the organization of workers who employ her, and is known to have been chosen by them and to be responsible to them.

In any of these plans great elasticity will be needed to avoid duplication of work and to maintain the closest possible

relation between the industrial nurse and those she visits. Aside from pointing out the relative advantages and disadvantages of each method, as they appear to the writer, no general solution can be offered. The needs of the industry, the local agencies at hand, *the prejudices of the workers* and many other factors will guide the employer in his decision as to what means he shall take to establish a visiting nurse service. Good and valuable work is possible for the nurse no matter what the details of organization may be.

One prejudice of workers should be considered. In many towns the visiting nurse association has the name of being a charity. Where it is not plain that the association serves all classes and collects pay for service, consideration for the workers often influences the employer in establishing his own service with its resulting benefits to the firm and greater acceptability to the workers.

The visiting nurse in industry meets the same problems and must handle them in the same manner as any other visiting nurse. The backing of the company is perhaps not so strong or general as that of a good visiting nurse association because all the elements of the population are not represented.^{1 2}

The local physicians sometimes feel that a nurse has been thrust upon them unasked but they are usually glad to accept her services for their patients when they find her obedient to their orders, quick in reporting a change in a patient's condition and thorough in her care of the sick.

Her technique should be that of the best visiting nurse associations³ and because she is so often without supervision, she should be careful to make it plain that she can keep up the standard of her work without example or precept.

¹ In this connection, help and inspiration are to be found in Miss Gardner's "Public Health Nursing," Part II, Chapter V, The Nurse Working Alone.

² Where the nurse is paid by an association of employés or of employers with employés, the nurse's backing, at least with her patients, is all that can be desired.

³ "Visiting Nurse Manual," Edna L. Foley, R. N., page 43 to page 71.

In a small industrial town, a nurse who expects to do bedside nursing in the homes of the workers will gain by taking the time at first to call on each physician in the community. In either a small town or in a large city, if there is a visiting nurse association having standing orders approved by all the doctors, the industrial visiting nurse will do well to follow these orders in her work in the homes. If she is the only visiting nurse and especially if she is a newcomer, it may be well to obtain if possible such orders through the local medical society. The advisability of this step will depend on local conditions. Sometimes one or more local physicians may take this matter up for the nurse, or her employer may be willing to do so. After the nurse becomes known she may be able to do it for herself. Until some standing orders are provided for her use she will necessarily use great caution in doing anything for her patients except to make them comfortable until she has consulted the physician in charge.

The wise general rule for visiting nurses will be observed: "It is a wise rule that a doctor shall be in attendance on every case cared for by public health nurses and it is an equally wise rule that the nurse should continue on the case only if it is his pleasure. It will usually be his pleasure if she does her work well, or if he finds that patients, as often happens, refuse to call him unless he permits such service. In case of change of doctor, and every public health nurse is familiar with the dizzy rapidity with which such changes take place, it is her duty to put herself in immediate communication with the new doctor, and usually it is wise to have a word on the subject with the departing one, lest she become involved in the complexities of the situation."¹

The work of the industrial visiting nurse differs from that of the ordinary visiting nurse in that most patients visited are seen in their homes by the nurse before the doctor has been consulted. Often the worker is not sick but at home for other reasons. In many cases, though not well, he does not

¹ "Public Health Nursing," Miss Mary S. Gardner, page 45.

consider his illness of enough importance to warrant the expense of a doctor's visit. The nurse's duty is to persuade the patient of the wisdom of seeing a doctor if necessary and then, if illness continues, to see that he understands and carries out his physician's orders and that he has whatever nursing care is required, teaching the patient and his family as would any other visiting nurse.

Every employé must be acquainted with the medical, surgical and nursing services at his command. While nothing should be *forced* upon any one, the worker may surely be taught by a sympathetic friend (the nurse, or if he does not know her well, his neighbor who has known her longer) to *want* what is to be of benefit to him.

When visiting nursing is established in an industry, a systematic method by which calls come to the nurse is necessary. Calls will undoubtedly come from many sources; from the employment office, the heads of departments, the workers, the company physician, and from the families of the workers, as well as from outside sources such as the visiting nurse association, industrial benefit associations, churches, etc. However, in order to be really efficient, each absentee should be visited at least once unless it is definitely known that he is not sick or that he needs no help. A regular daily system of notification from the employment office or from the time-keepers is the only way by which those needing aid can be promptly reached. In a small town the nurse may "happen to hear" of those needing her help but, even in the smallest place, this is an uncertain way of getting work done and in a city, where the need is often greatest, it is of no value at all.

Without prompt visits to all absentees, a great amount of preventable misery is sure to occur, such as the case in New York City where a cook, employed in a restaurant, was away from work on Friday. Her absence was reported to the nurse on Monday morning and in the afternoon a visit was made. The patient was alone and no one had entered her furnished room since the preceding week. She was delirious, her

temperature was 104, two gas lights and an oil heater were burning and the month was August. No time was lost in sending the irresponsible patient to the hospital in an ambulance, where it was found that she was suffering from typhoid fever. Her friends had gone to the country for a vacation and did not appear for several days. This is, of course, an extreme case, but it is not at all unusual to find a person ill and in need of care but without the least idea of how to go about getting help.

The industrial nurse who visits in the homes will not act as a detective, and the private affairs of her patients will be treated with the same consideration and confidence as similar information coming to the attention of the private duty or hospital nurse. When her patients have learned confidence in her discretion her opportunities for giving real help will be greatly increased. Many personal matters are sure to come to the industrial nurse's attention which concern no one but the patient or possibly his family. It is sometimes necessary to get the sympathy and understanding of the employer or of someone else high in authority and in close touch with the plant. The privilege of consulting at will with the employer or general manager is often allowed an industrial nurse and should be greatly valued by her. If she remembers the many demands upon his time and his great responsibilities, is sure of the accuracy and importance of her facts and presents them briefly, many an employer is only too glad to give freely of his time and interest. An industrial nurse should beware of the failing of continually asking favors for employés. Favors do not bring any desirable results to anyone.

The visiting nurse in industry will work with the various family physicians of her patients rather than, as in the first aid room, solely with the company physician. Coming, as she often does, without the knowledge of the family doctor or even before he has been called to attend the patient, she must make it very plain to both doctor and patient that she is carrying out the best principles of nursing ethics and the

best visiting nurse technique. She should be exact and particular in keeping all bedside notes and records, both in the patient's home and in the nurse's office at the plant. Her responsibility is fourfold: to her patient, to his physician, to her employer and to herself. Only by the same careful record of orders, treatments and observations as is required in a hospital can a nurse protect herself from chance of criticism. Her continued usefulness in her chosen work may sometime depend upon promptly recorded facts. The visiting nurse must spend enough time in the plant to keep her records or to see that they are kept, to get her calls and to see workers in the plant who may wish to consult her. The noon hour will often be a good time to see the workers.

The visiting industrial nurse does not finish her duties when her patient no longer needs nursing care. She will be expected to keep in touch with him until he is able to go to work. This attention during convalescence is an important factor in keeping the worker patient until he is fully recovered and in adjusting him to his work later. Arrangements for medical examination by the company doctor should be made when necessary to prevent the worker returning too soon or while in a condition to be a menace to others. Many firms make such an examination a routine requirement, and where this is not the case, the industrial nurse should assure herself, as far as she can, through consultation with the family physician, that the patient is able to return and that he has suitable work. This precaution is of special importance where the illness has been long or obscure, where industrial disease has not been excluded, and in all respiratory diseases.

After return to work many patients should be kept under friendly observation by the first aid room nurse. Some will need to be reminded to return to their doctors; perhaps the foreman will have to be asked for a time allowance for the visit. Some may be ordered treatment by their doctors which will have to be given by the nurse in the first aid room. Others may not seem strong and the nurse may make some

excuse to get them to her office from time to time in the noon hour. Young persons and others will have weight cards kept so that the nurse will be able to give the doctor valuable information in sending a patient to him. The first aid nursing and the visiting nursing are inseparable if good team work is to be done.

CHAPTER IX

THE DAY'S WORK

The First Aid Room:—The first aid room nurse or her clerk will, in most plants, be expected to open the first aid room when work begins in the morning. Where, as in urgent war work, the plant runs continuously, the first aid room will probably never be closed. Some firms, under these conditions, employ a male attendant for the night work. There is, however, no more reason to exclude a nurse from night work in an industrial first aid room than to expect hospital orderlies to do all the night work in a hospital. Nevertheless such use of a woman's time *might* be considered a violation of the labor laws of some states. With three shifts of nurses, a comfortable time schedule would be possible and the night workers, who are surely not less liable to injury and illness than the day force, would have the same protection. Employers, who have had experience with both nurses and male attendants, are unanimous in saying that the former are more efficient, more interested and to be preferred even in establishments where the employés are all or chiefly men.

Any objection a nurse might have to such employment, aside from the disadvantages inseparable from any night duty, vanish when she learns how much respect even the roughest man has for a trained nurse. The writer has yet to hear of even one instance of intentional rudeness or disrespect from any male employé to any industrial nurse at any time. It would, nevertheless, be wise in choosing trained nurses for night work to select women of exceptional dignity and mature years. A well placed first aid room will not be in an isolated location and, if used at night, care should be taken to have it where all that goes on within may be easily observed from without.

In a plant requiring continuous first aid service, the industrial nurse will probably be fully occupied with first aid work and redressings, together with the care of workers who are

taken sick in the plant. In order to have any time at all for other work, or even for acquiring a general knowledge of the industry, most careful planning of work is necessary. If all possible routine duties are attended to in the early hours, emergencies are more easily handled and time is more likely to be found for developing and improving the service. First aid room work increases and decreases with the seasons, with the pressure of work throughout the plant, with the weather, even with slight changes in factory routine or department management, so that at times there may be comparatively little to do. When these times come, the nurse, whose routine work is always finished at as early an hour as possible, will find leisure to study her problems and improve her methods.

Getting the workers to return for redressings at the exact time they have been instructed to come will often be a difficulty. In one place this was overcome by giving a printed slip at the first visit. This slip the patient took to the foreman who kept it on file and sent it back to the first aid room with the patient at each visit. The same paper served until the case was closed, when that fact was entered for the further information of the foreman. Sample slips follow:—

June 24, 1918

Or—

June 26, 1918

Mary Smith, No. 35, Dept. 3.

Remarks, sick, will see family doctor.

Injured, 6/26, 1918, 1/05 P. M. Nature of injury, splinter 1 f.

Disposition, removed splinter, sent home because sick.

Incapacity, complete at present, from illness not injury.

Return to first aid room? on return to will

To return to Dr. at A. M. P. M.

Send to first aid room visiting nurse to call this P. M.

M. M. B. Nurse.

A new date for return is entered at each visit unless the case is closed, then "HEALED" is written diagonally across the sheet and it is sent again to the foreman. The returns are checked up by means of the day book and patients' individual cards which will be described. The careful following up of those who do not return when expected is a necessary part of the duties of the first aid room nurse, both for the safety of the patient and for the protection of the company from accusation of neglect or from possible unjust claims. The first aid nurse need not go to the patient's home but she should be able to send some reliable person. It is, however, more satisfactory for the nurse to go herself. A patient needing slight dressing might become ill from other causes and no home visitor would know the right thing to be done or do it as well as the nurse. In cases where there is doubt as to whether the illness had its origin from the injury, the nurse will see that the patient is again placed under the observation of the company physician. She will be able to assist the foreman, the employment office and the compensation department by

weeding out those workers who, having suffered a small injury, stay at home and, without notifying the employer, take work elsewhere or even move out of town.

When workers are taken ill during working hours, the nurse will often be obliged to follow them to their homes in order to make sure of excluding contagion from the plant. Where no regular visiting nurse service is provided, the first aid nurse will have frequent reason to know that workers who should have help and advice are at home and not likely to get either unless their condition becomes alarming to the inexperienced family or indifferent landlady.

Much interesting follow-up work, for which nurses find the need in the first aid room, must wait until a visiting nurse service is established. The nurse must return to a room full of workers who need prompt attention to avoid loss of time, idle machines, personal loss of money to piece workers, confusion in the departments of the plant and an upsetting of the whole system by which a busy day may go through without worry, haste or confusion.

After a little experience, the first aid nurse will know about how many dressings she can do in half an hour, and the appointments for the workers may be so arranged that time is not wasted. In some departments, it will be easier for the foremen to send all his people to the first aid room and have it over with. In other departments, where machines might be idle if several workers left, coöperation will be easier if the workers are allowed to come to the first aid room one at a time. These things can only be learned by experience in the industry itself. Thought and consideration in these matters will be part of the nurse's contribution to good team work. In opening a new first aid department, some confusion is inevitable, but much can be avoided by thought and, after a week or so, the return of patients should be so systematized that it is accurately accomplished with little trouble and almost no friction.

For the quick handling of many small dressings, mostly fingers, the following plan works well.

The automatic return of the patients having been assured and everything in the dressing room being ready, the clerk sits at a table near the door with the daybook, patients' individual cards, pad of return slips for foremen, duplicate book for writing notes to the company doctor, duplicate book for sending reports to the main office and any other forms that may be required by the particular plant. The clerk enters all names in the daybook as the patients come in, takes the slips which they have brought from their foremen, and fills in the proper spaces in the daybook as the nurse tells her what to write. She marks the foremen's slips as directed by the nurse and has them ready to give to the patient as he leaves the room. In odd moments she will, perhaps, be able to assist in sterilizing instruments, in keeping the dressing table in order and in putting on some bandages. A few lessons in bandaging will interest her and the knowledge will be useful. In a busy room, however, the clerk will be fully occupied with the record table until the routine work is finished.

The nurse stands between the stationary basin and the dressing table, the dressing table on her right. The dressings will then be done as rapidly as possible. Even so the nurse will find opportunity to teach the patients many things. Where the dressings are of a simple nature, it helps to have as many persons waiting in the first aid room as possible. There is little to be said about first aid, the necessity of prompt visits to the first aid room and the folly of neglect to use all safety devices provided, that will not be more impressive if heard by the workers in groups. The feeling, as the workers often say, that "the nurse won't like it" is a strong factor and not to be overlooked in maintaining proper discipline. Nevertheless, while this sort of publicity may do good in a mill or with young people, it is, doubtless, totally unsuited to some other industries or to people who are shy. It has no use or excuse in any dealings with the personal affairs of anyone. Where such groups are together naturally and comfortably, workers and nurse have a chance to

become acquainted, the workers learn a good deal, especially as to what they must not expect the nurse to do for them, and the nurse, if she is not easily confused, enjoys the informal "meeting."

A conspicuous sign in the first aid room to the effect that the nurse will be in her office between twelve and one to see any one who wishes to consult her will make that a busy hour and will do much to leave the early hours free for the routine work of the plant.

A sample page from a first aid room daybook will give an idea of what may happen during an average day in a plant employing five thousand or more. Purposely, a day was chosen in which no startling accidents occurred. Very serious injuries are uncommon in modern plants and, while almost anything *may* happen, such occurrences would make a day anything but *average*. The names are, of course, fictitious.

Where a daily report is sent to the general manager, the main office or elsewhere, a book with duplicate pages and carbon paper permits the day's record to be used as it is for the report, while the carbon copy remains in the book for a permanent record and for use in writing up the patients' individual cards.¹

The daybook is planned to record all that happens during the day: the patients seen, the treatments given, outside visits of the nurse, unless there is a regular visiting service, in which case convenience may require separate records and a special daybook for the visiting work.²

¹ See Chapter X, Records.

² The National Organization for Public Health Nursing has devised an excellent system of day book and record card for visiting nursing which is adaptable to the requirements of many industrial nurses.

Cotton, Wool & Company First Aid Room Daily Report					Dec. 23rd, 1918
Time	Return	Name	No. Dept.	Disability	Disposition, Treatment, Remarks
8	12/24	J. Lee	3 Spin.	Crushed 1 f. L.	Wet boric. To Dr. Chief. Caught in frame.
	12/24	A. Brown	Mach.	Nail torn tip th. L.	Returned to work.—Accident at home, 6:30 A. M. 3% iodine, dry ster.
	12/24	B. Smith	6 Dye.	Sl. burn top L. foot	Moist boric. Dye slopped.
	12/24	C. Coe	10 Bleach	Burn L. eye	Flushed in dept. Wh. wine vin. Eye specialist. Emptying drum of caustic soda carelessly.
9	12/24	H. Hoe	14 "	Burn L. foot, sl.	Water, vin. B. A. Oint. Did not take time to put on boots. Caustic soda.
	Healed	M. May	56 Carp.	Redressing	As before. Order Dr. Chief.
	Healed	N. Kay	87 Paint.	Spr. ankle	Massage, bandage. Order Dr. Chief.
10	12/24	C. Tate	98 Office	Lac. 1 f. L.	3% iodine, dry ster. Sharpening pencil.
	—	I. Butts	6 Twist.	Hysterical	Rest in bed, taken home. Brother had enlisted and left for Canada to-day.
	12/24	F. Fay	90 Tool	Emery, cornea, L.	Sent to eye specialist. Left off goggles.
12	12/24	E. Day	10 Test.	Under weight	83 lbs. Saw Dr. T. 12/21 Brought well planned lunch. Adv. as to habits.
to	12/26	D. Wat	97 Stenog.	Var. veins	Bandaged. Surgeon adv. no op. Measure for stocking next visit 8 A. M.
1	1/8	D. M. Potts	6 Fin.	Went to T. B. Gaining.	Clinic 12/21. To return 1/7.
	1/8	G. Kane	56 SP.	Deserted by h. nursery. Referred to 12 Foreman will a	husband, 2 ch., 1 & 4, at day Main St. re mother's pension. Followed home visits made. See cards.
2	Mary	Smith 123	Noman A	ve.	Following parts of factory visited.
to	Beatrice	Brown, 8	9 Smith St.	t.	See spec. report re goggles in Grinding Room, sent in duplicate to Gen. Mgr., Safety Dept., Head of Dept. and foreman of room after conference with head of dept. and foreman.
4	Bleach	House re C	oe & Hoe		
to	Spin 3	re J. Lee,			
6	Tool	F. Fay			

The full number of cases for this day is not included. To save space, fifty-six first aid cases and redressings are omitted but those included are fairly representative.

This is a good opportunity to say a word concerning special reports which may be made about conditions in different

departments. The coöperation and good will of the department heads and of the foremen must be kept. For instance, in the case of the goggles mentioned above, there were not enough in the room to supply the men; they had been ordered several times. The report was made to every one who could have any interest in the affair, *after* talking with the heads of the particular part of the plant. This conference placed the nurse in the position where she could help most. The wheels once in motion, the goggles arrived the next week.

A daybook should be planned according to the size and organization of the plant. One at least twelve inches wide will be required to afford space for the information needed in every case. It should be bound at the top.

A regular weekly schedule will help in making the work go smoothly and in assuring attention to easily forgotten details. It is helpful to have both daily and weekly schedules of work posted, both as reminders to the present force and for the information of others in case of a sudden change in personnel. The weekly inspection of other stations, the times at which first aid kits from outlying parts of the plant are to be brought in for replenishing, etc., should be included.

The industrial nurse must not forget that, in the absence of the company physician, she is more interested in the first aid room than any one else, that every one in all other departments has his own work to do and that first aid will interest him less than his own duties except when he needs attention for himself or for a fellow worker. In whatever way responsibilities may have been delegated to others, it still remains the first duty of the industrial nurse to see that arrangements for the handling of any injury are not only *made*, but that they are *maintained* in a serviceable condition. Without carefully kept schedules, it is an easy matter to forget, in the pressure of daily duties, the inspection of the respirator at the fumigating plant or the renewal and probably necessary dilution of the 3% iodine which was left with the foreman in the picking room to prevent trouble from the constant pricking of the men's hands.

Where there is more than one first aid station a daybook should be kept in each, the person in charge writing down every occurrence and sending the original record to the nurse each day. By this means the record cards of all workers may be kept in the main station and the nurse is able to see just how much has been done in the other rooms. The last hour or hours of the day may well be used in part for calling up the outlying first aid stations, inquiring what has happened and making sure that each worker, requiring attention from physician or nurse, has care while his whereabouts is still known.

It is perhaps superfluous to repeat that, where a physician spends all or a regular part of his time in the plant, details of organization and routine rest with him. Most physicians are, however, glad to have some one arrange their work so that they are not obliged to spend time in waiting or in sending for workers.

In some plants it is practical for the first-aid nurse to spend certain hours only at the plant and for her to devote a good deal of time to home visiting.

The keeping of records is so much a part of the day's work that it has been impossible to omit the subject entirely from this chapter.

CHAPTER X

RECORDS AND REPORTS FOR FIRST AID ROOM AND VISITING NURSE

The records kept by the industrial nurse should be planned to aid her in meeting her fourfold responsibility:—to the worker, to the physician, to her employer and to herself.

For the benefit of the worker, the full records in the plant should show what illnesses and accidents he has suffered during the period of his employment, what care and benefit or compensation he has had, what has been done to prevent future disaster, by improvement in his physical condition, by correction of his physical defects, or by changes in the conditions under which he works; together with the physical condition of the worker on employment, his educational advantages, his previous experience, his home surroundings and his working record.¹

All this is possible for the industrial nurse working in a small plant who is able to interview each new worker, to visit his home, and who has also the privilege of sending patients at will to the company doctor. In a large plant this is only possible by routine physical examination of all new workers by a physician and home visits from the nurse, in addition to the closest coöperation in record keeping between physician and nurse and with the employment, statistical and safety departments.

The illness, accident, work, family and medical records, if kept together, present a picture of the worker which is often of great value to him and to the industry by making it possible to place him where he will do the best work and where he will, consequently, be happiest and most prosperous.

¹ See next chapter for employment records.

The responsibility of the industrial nurse to the attending physician, whether the company physician or the family doctor, requires a complete account of the doctor's orders, of all the nurse does for the patient and of all she observes as to his condition and surroundings.

The responsibility of the nurse to her employer demands, in addition to all the above, an account of how time and possibly funds are used and a summary of results attained.

To the industrial nurse herself the records are indispensable. They show her what she has accomplished, and sometimes, even more important, that which she has not accomplished. They aid her memory, prevent duplication of effort and make changes of personnel possible with the minimum of confusion; they make her work intelligent by giving her a picture of the worker in connection with his environment at home and at work. They are her best, and sometimes have been her only protection from unjust criticism and even legal complications.

The proper coördination and interpretation of records is work for a trained statistician. Full description of methods of record keeping now in vogue would fill a volume. As the organization of industry for safety, efficiency and coöperation progresses, standards for all such records will undoubtedly be formed and more or less uniform systems will be evolved for the different industries. These problems should be taken up in unison by organizations interested in the prevention of illness and accident. With the coming of health insurance, state authorities may require certain standards for such record keeping in all industries. In the meantime each plant must work out its own system to suit its needs, utilizing the help and guidance of expert statisticians when available.

A nurse, beginning industrial nursing, where there is a statistical department, should carefully plan out her own needs in the keeping of records and note the ways in which her records should be useful in connection with those of the employment, statistical and safety departments.

It is a great advantage if the employer permits the industrial nurse to have access to the records of other departments which may add to her knowledge of the worker as an individual and as a member of a family, and of the conditions under which he works, with their influence on his health and efficiency. Duplication should be avoided. After the nurse has clearly decided what records she needs, consultation with the employer will usually result in enlisting for her the coöperation of the other departments whose records may be used to supplement her own or in which her findings will be of value—the employment, statistical and safety departments at least.

This interchange of records must not be allowed to affect the privacy of the personal affairs of the workers. The nurse will need memoranda here to aid her memory and to make much of her work of permanent use, but these things should be absolutely confidential and the workers should know that this is the case.

Where the company physician is actually employed in the plant at regular times, he will probably have his own records which may supplant a part of the nurse's records or which may be supplemented by them. In a medical department with a physician in regular attendance the medical and nursing records should be kept in harmony and without duplication, but the final broad use of material gathered should rest with the physician unless he prefers to delegate such work to the nurse.

The writer, not being a statistician, can only suggest to the industrial nurse methods by which she will be able to keep her own work in hand from the first day of her employment, without waiting for the development of all records necessary for full efficiency.

We will assume that the nurse is employed to begin industrial nursing in a plant with the minimum of medical service from the company physician.

Before taking up her duties, if there is time, she should ask to be provided with a daybook such as has been described in

the last chapter. With the addition of some record cards in two colors, one color for industrial injuries and the other color for all other cases, the nurse will be able to keep an accurate account of all that happens in her department. She will need a small box with alphabetical guide for open cases and a filing cabinet for closed cases. If work must begin before printing can be done, a large blank book must serve as a record and the proper cards be made out as soon as they can be obtained. One card should serve a single worker for as long a time as possible, only a single line being used for a disability unless the patient is under observation for some time.¹

INDIVIDUAL RECORD. FIRST AID ROOM

The opposite side should be ruled and have column headings but no top heading.²

The record cards may be filed numerically or alphabetically; if alphabetically, an accession book will be required for listing new cases, whether new individuals or additional occurrences to former patients; if numerically, an alphabetical index should be kept. By either of these methods the

¹ A code for writing up cards is easily devised and is useful in saving space as well as for making the interpretation of the entries impossible for one who lacks the key. The common hazards may each be given a number, the common treatments a letter, departments a Roman numeral etc.

²The cards should be a standard size, at least 5 in. \times 8 in.

total number of all cases may be found for any given time. The sum found in this way will prove or disprove the correctness of many a report.

A signal system of colored tags or crayon marks at the top of the cards will serve to classify them so that the total of any desired group may be obtained. Another way is to have a supply of cards of different colors, and guide cards. The name and identification of the worker together with the item to be classified is written on a card and is filed in its proper place.

Suppose it were desired to discover at what hour of the day the greatest number of injuries occurred. The cards should state date, day, name, department and number, kind of injury and time. The guide cards would be marked with the time as follows: 7 to 7.30; 7.30 to 8; 8 to 8.30, etc. After a number of years such a record would yield material for an accurate report of the incidence of industrial injury as affected by time of day, day of week, occurrence of holiday, season of year.

By means of these cross references, reports may be made, if desirable, of the comparative number of accidents in the different departments, the prevalence of certain illnesses in certain occupations, the comparative prevalence of injury under different speeds in similar processes or any special matter about which the management is curious or which will help the nurse to point an argument. Elaborate records and reports require the attention of skilled clerks, but many little studies may be made by the nurse alone which will prove a point even though the requirements of the firm do not call for extensive record keeping. Any one with experience in industry, or even with a little imagination, will need no argument as to the need and the uses of records in industrial nursing.

In keeping the records it is needful to guard against the red tape which may defeat their purpose. In one plant the requirement that a worker, before applying for first aid, must have a long paper filled out by his superior and that he must

give a good deal of personal history before being attended to, reduced the number applying for first aid from an average of forty to an average of ten a day. The number of infections increased at once. When the rule was changed the number applying for first aid became normal and the number of infections was at once reduced. The records made it possible for the nurse to point out the folly of making first aid a burden. The main thing is that the nurse should be accessible and that the workers should feel that they are welcome. Information required for records may be obtained in many cases during a casual conversation at the first interview. It might better not be obtained at all than that the worker should feel that anything exceeded in importance his own troubles.

Some nurses with a statistical turn of mind might be inclined to overdo the matter of records, but the common tendency is quite the other way. Most nurses are so busy that they are likely to neglect the record in favor of immediate service to the human being.

It is not enough to do the day's work. Findings in the first aid room and in the homes should be checked up in the employment office with time lost and labor performed by the worker and in the statistical department for the preparation of comparative studies of different departments of the plant.

Reports—Daily, Monthly, Annual.—In establishments where the nurse's records are tabulated and interpreted in another department, or where the nurse is employed by an organization of workers and where she is not the secretary of that organization and the records are kept in the office of the benefit, mutual aid or other association, daily reports of nursing work, either in the plant or in the homes, are often desirable. An employer will sometimes wish such a report solely for his own interest. The copying of daily records is unnecessary. If the daybook is arranged with duplicate pages and carbon paper, the original sheet, if carefully written, will, with a summary of the different totals at the bottom, answer every purpose. When this use is to be made

of the daybook, care should be taken in planning it that there is space for all information desired both by the nurse and by the other interested departments. Patients calling on the nurse for advice in personal, confidential matters may be listed without detail as "Personal."

The following is a monthly report¹ from a plant in a small town where local public health agencies were lacking or undeveloped and where a good deal of public health work was done by the industrial nurses, who lived in a nursing center, attended to the first aid work in the plant under the direction of physicians, and carried on visiting nursing under the auspices of the employés' benefit association and under the direction of the family physicians of the patients.

The work at the nurse's residence was confined to nursing activities, the town being well equipped with other social, educational and recreational facilities.

The yearly report may be easily made up from the monthly reports. At regular but not too frequent intervals, every three or six months or yearly, a nonstatistical report affords an opportunity to take account of progress or lack of progress, to search for hampering conditions and to point out possible means for improving the usefulness and efficiency of the nursing service. Such an account of work done or contemplated will do much to keep the nursing department from stagnation, the nurse from possibly unwarranted self-satisfaction and cannot be wholly without interest to the employer.

¹ In the monthly report illustrated, columns 2, 3, 4, 6, 7, 8, 9, and 11 are filled in by the nurse; Columns 1, 5, 10 and 12 are provided by the employment office and by the office of the Mutual Aid Society.

M. Male.

REPORT OF FIRST AID WORK AND NURSING FOR JUNE, 1918
First Aid Rooms

The number of interesting and useful ways of presenting information easily obtainable from well-kept industrial nursing records is large. The writer has only tried to point out a few possibilities. A thoughtful nurse in any industry will see numberless ways of using her records, not only for her own information and benefit, but for the benefit of worker and employer as well.

The Records of the Visiting Industrial Nurse.—The records of the home visiting should be closely coöordinated with those of the first aid room and with the employment office, where coöperation with that department is allowed. A description of a system of combined records for the use of the industrial nurse who is also in charge of the employment office will be found in the next chapter. Where all the records of each worker cannot be filed together, the visiting nurse can easily modify any good system in use by a visiting nurse association, or that advocated by the National Organization for Public Health Nursing, to suit her needs.

The visiting nurse will need a daybook in which to record the story of each day. A duplicate page book is useful and time saving. The original sheet may be used by the person responsible for writing up the cards and may afterwards be sent to the person wishing a daily report, while the duplicate remains as a record. Bedside notes for use in the patient's home in recording the orders of the physician, the condition of the patient and the work of the nurse must not be forgotten. Where written orders for the care of the patient can be obtained it is wise to preserve them on file in their original form, with the other papers concerning the patient.

CHAPTER XI

THE INDUSTRIAL NURSE AND THE EMPLOYMENT OFFICE RECORDS

Employment management offers a field of service for women in which their peculiar fitness is being increasingly recognized. It is an opportunity for the nurse who has had experience in industry. Close connection with the "hiring and firing" of a large establishment, and personal interviews with applicants for employment—with the nurse's opportunities for getting a full home, health, work and educational picture of the worker—and a system of interviewing all who leave, will reveal much avoidable inefficiency with consequent lessening of production. Causes for the dissatisfaction of employés are found and resulting needless "labor turnover" is reduced. Employment managers throughout the country are succeeding in reducing this labor turnover and in increasing the efficiency and contentment of the workers, so benefiting both them and the industry. Nurses, as well as other educated women, are filling such positions and should continue to fill them in increasing numbers, especially in the industries where many women and girls are employed.

Service in the employment office, either as manager or as assistant manager, is a logical development of the earlier and better known contributions of the nurse to industrial welfare. Her earlier contacts with industry aid her, if she is otherwise prepared for her new duties, in becoming an employment manager of exceptional value. Courses of study in preparation for this work are being offered in several colleges. Lacking a special theoretical training, a nurse, serving an apprenticeship in a well-managed and successful employment department as assistant or otherwise, would gain an insight into the necessary procedures and records

which, in addition to a familiarity with industry already acquired, should enable her to assume the control of such a department.

The work of employment management, as understood in most modern organizations, includes much that has been known—sometimes to its disadvantage in the estimation of the worker—as welfare work or welfare supervision. Such a department is now, more accurately, frequently called a service department. While its main function is to provide for the plant a sufficient number of healthy (or sufficiently healthy) and contented employés who are fitted to do the work required in an efficient manner, a secondary function is to reduce the labor "turnover" and the resulting expense of training new workers with their increased liability to industrial injury. The conception of the work, however, as held by many employment managers is that of a public service to the community, and its opportunities quite justify them in holding such an ideal.

In those plants so fortunate as to have a physician in constant attendance, his work will naturally be closely associated with that of the employment department. In such a wide reaching medical department, the industrial nurse is of special value in the employment office as assistant to the physician in his interviews with the patients, in the proper recording of his findings and in the many other ways in which a nurse is accustomed to aid a physician.

At the present time nurses are more frequently working at employment problems in small establishments where there is no separate employment manager. A more or less informal employment department is sometimes developed in connection with the already existing nursing service. Any plant, where the physical examination of employés by a physician is not a routine measure, will gain in the health of the workers and in their contentment and efficiency, to say nothing of freedom from claims ⁽¹⁾ for injuries which occur.

¹ Honest persons have been known to be unconscious of defects until attention was called to them by some accident. Men have been found

curred elsewhere, by the help of a nurse in the employment of new workers.

The consideration of a large employment office will not be attempted. A nurse contemplating the management of such a department would either grow into it from a small beginning or should take steps to prepare herself for the work.

While the first thought might be that the employment department will select workers, the truth is that selection of workers is now largely a thing of the past, along with our former stream of immigration. Fortunately for those who seek work, and indeed for the employer also, the problem, in these days, is often fitting the applicant to the work which must be done or even fitting work to the applicant. This means ceaseless instruction and a large outlay of actual money in the acquisition of each new employé. By the exercise of judgment and the use of records in the employment office, it is possible to do much toward retaining good employés and toward fitting new ones to their work. Some firms make it a practice not to refuse employment to any one capable of doing work, except where the presence of infection or the existence of epilepsy would render such employment dangerous. Many employers are willing to go to a good deal of trouble to assist an applicant in overcoming his handicap or in finding a cure for his disease. Furthermore, it is being recognized that certain handicaps are attended by no disadvantages in some occupations. Deafness often helps attention when the work demands close application. There are occupations in which even the blind excel, such as work requiring sensitive touch rather than keen eyesight. Even years are not the disadvantage they were considered for some time after Dr. Osler's unfortunately misunderstood remark. Women of mature years and high character have a steady influence on the girls with whom they work, and are found to be a distinct force in making undesirable who were blind in one eye and who had no idea of the fact until told by the examiner. Defects of hearing in one ear may entirely escape notice. An explosion might cause such a person to assign it as the cause of a defect of long standing.

women uncomfortable in the company of those of better morals and in causing their quiet elimination from the plant. Old men have had a chance to show that they have qualities lacking in younger people and have reentered industry in considerable numbers since war demands have taken so many of the younger men.

Now that so many of our soldiers and sailors are returning to civil life maimed and crippled, patriotic employers everywhere are searching for suitable positions for the handicapped. The industrial physician and nurse help to discharge the debt of the nation when they make it possible for one of these young men to take up again a useful life of productive labor.

The possibilities of service from handicapped labor are understood but by a few at present. Mr. F. B. Gilbreth by his motion studies is doing much to promote a knowledge of the necessary movements to perform certain actions, but so far but a comparatively small number know of his work. He has suggested that a dental nurse (an occupation which he proposed to relieve the more highly trained dentist of simple work such as cleaning teeth) can be deaf, one-eyed, one-armed and legless and yet be efficient.¹ It requires little imagination to conceive that a traffic officer may be one-eyed, one-armed, and legless without materially interfering with his work. Frequently a very simple appliance or change in the form of an implement will enable a cripple to do quite complicated work. Through the publication of pictures of crippled soldiers at work this knowledge is becoming more general. A number of examples are illustrated in Dr. W. R. Dunton's "Reconstruction Therapy," Chapter XI, Prosthetic Appliances.

The fact that a worker is conspicuously handicapped will frequently urge him to every effort to show his appreciation of the consideration given him. When the applicant suffers from a curable trouble advice rather than material relief

¹ A New Occupation for the Crippled Soldier—The Conservation of the World's Teeth. Trained Nurse and Hospital Review.

will often make it possible for a formerly inefficient worker to hold a good "job." Service of this kind need not mean a large expenditure for the actual care of strangers. Until the state assumes responsibility for the health of everyone, it must continue to be the duty of all who are in a position to discover the physical shortcomings of others to, at least, suggest the first steps necessary in the search for health.

Inquiry into the previous education and experience of applicants, instead of giving them, without question, the work for which they ask, will often discover good workers for a much higher grade of labor. High school graduates have been found running errands while the office force needed clerks and while young people were wanted to train for good positions.

Numerous psychological tests are in vogue for discovering the mental capacity of workers with a view to aiding their advancement. Some employment managers use such tests, but the proper interpretation of the results is of so technical a nature that their usefulness is questionable unless employed by a psychologist.¹

The initial interview with the applicant by the nurse will attain many desirable results. Findings made permanently available in the records will be of daily use in making changes in the force to allow for the varying demands of the different departments. They will show which workers, not required in one department, can be made available for the different duties of another department, temporarily busier, thus avoiding the practice, wasteful both to the employer and to the employé, of laying off workers in one section while advertising for help in another.

Strange surroundings are less confusing when the worker is met by a responsible person whose business it is to see that he has some one to teach him his new duties, explain to him the provisions made for his safety and comfort, together with

¹ "There is as yet no secure scientific method of testing applicants." "Industrial Loyalty, its Value, its Creation, its Preservation," Boyd Fisher.

the precautions expected of him, and who puts him in charge of another worker who will take him to the lunch room at noon and introduce him to some of his future associates.

The nurse, as employment manager or working in the employment office, should learn the particular needs of the workers. She should learn as much as possible of the processes at which women and girls work and should be able to state accurately if they involve too much strain, and show why such is the case. She should understand the work required of the men and the boys. Without this knowledge she will make mistakes in placing workers and she will not be able to speak convincingly in her efforts at adjustment. The nurse employment manager or assistant employment manager may be expected to be responsible for the general behavior of the women and girls except in the technical details of their work. She may be expected to look after the maintenance of healthful conditions in the plant as to cleanliness, light, warmth, ventilation, moisture, etc., by keeping the management informed as to her observations.

In some plants a representative of the employment office calls at the home of each new worker, especially young people, in order to make the acquaintance of the parents and to promote mutual friendship and helpfulness. The industrial nurse, in the employment office as well as in the first aid room, should be able to provide information to workers as to housing, boarding and rooming places for men and women, hospital and dispensary facilities, night schools, day nurseries, means of transportation and many other matters which will appear in her daily contact with the workers.

There should be opportunities to study the health of the workers in relation to their efficiency. If the management will allow the nurse to keep in touch with the paymaster's department, she can watch the wage sheets of the workers and will often find a steady decrease of earnings an early indication of failing health. With information obtained from the timekeepers the nurse in the employment office of a small plant or through the visiting nurse of a large organiza-

tion will be able to point out inadequate means of transportation, unreasonable distances to be traveled and many other matters which might be adjusted for the benefit of the workers if the employer's attention were called to the exact need. A report from the industrial visiting nurse of the necessary expense of living was known to cause one employer to raise materially his minimum wage.

The industrial nurse must not be exploited in the dismissal of employés. If she finds the physical condition of the worker such as to make rest advisable, she should be able, with the coöperation of the family doctor and the worker's family or friends, to advise or assist the sick person to get proper medical care and to make it possible for him to take the necessary treatment. Most workers, who see what seems to them a practical way of overcoming their ill health, are willing to stop work and to make the effort to get well. The nurse can arrange matters with these workers so that resignation will be voluntary, reëmployment depending on improved physical condition.

No dismissal of an employé for cause or for the reduction of force should be imputed to the nurse. This must be continually guarded against. Foremen wishing to get rid of a worker will sometimes unthinkingly involve the nurse, with no real reason for doing so. If the nurse has been instrumental in proving the inadvisability of the continued employment of any worker, justice to the worker and to the nurse demands that she have an opportunity to talk with the employé and make plain to him just why other work will suit him better. No worker should be turned away without being made to feel that sympathetic consideration has been given him and that, if he were suited to the employment, he would *like* to work for a company showing him such kindness. Neither should a worker or applicant be turned away without thought as to his next "job." If no work can be found in the plant for an applicant, he should be told if possible where to apply for employment. It may even be worth while, in some instances, to find a position for him.

With the development of noncommercial local, state and federal employment bureaus, it is becoming easier in many localities to place applicants for work where they will be able to use their talents to their best personal advantage.

An interview with each departing employé is important in order to obtain a record of why he *thinks* he is discharged so that comparison may be made with the reasons given by those discharging him. This also affords an opportunity to discover why the worker who leaves of his own accord is dissatisfied with his "job." Much tact is sometimes required to get this information, but the findings are often well worth recording and tabulating.

The industrial nurse, in the employment office, first aid room or visiting in the homes, who gives and obtains good coöperation should have through her records something of value to offer in the study of the relation of hours of work and of fatigue to illness and to injury as well as to output; in the effect of speeding-up on the number of injuries and on the endurance of the workers; in showing the economic and health value of proper lunches and of regular periods of rest; in pointing out the consequences of the employment of expectant mothers and of mothers of little children, especially with regard to the prevalence of miscarriage and infant mortality; as well as in searching out the less obvious health and accident hazards.

The record cards and blanks illustrated are in actual use by nurses working in connection with the employment of labor. They will prove suggestive to one who must devise such conveniences and who has no precedent in beginning a record system. The forms shown are specially adapted to the needle trades and will require modification for any plant. If all the cards are uniform in size they may be filed together during the employment of the worker.

The description of other printed matter is also intended to be merely suggestive, some plants requiring few forms and others with many departments having entirely different needs. The industrial nurse beginning alone or with little

assistance should guard against a multiplicity of forms and blanks which cannot be properly used for lack of time. It is easier to ask for additional forms when their need is evident than to explain why a large number of blanks provided in the beginning have not been used.

The outline for the first interview, while suggestive, will probably be exactly suited only to the plant for which it was devised. The outline for the observation of the physical condition of the applicant by the nurse is in no sense intended to supplant a medical examination by a physician. It is merely a guide to the observation of conditions which might indicate consultation with the physician in those plants not providing medical examination of all applicants as a matter of general policy.

The observation of the physical condition of an applicant need not be very prolonged. Much may be observed while talking to the person. If the nurse explains as she proceeds that the eyes are examined so that the applicant may not be given work injurious to defective eyes, that the ears are examined to make sure that the worker is able to hear signals in connection with his work and if the nurse has a *reputation* for being able and anxious to help people, there will be few if any who will object to this interest in their welfare. In this field as in all others the nurse should carefully guard her reputation. Opinion is easily formed and hard to change. Years of thoughtful care and work for others may not enable one to entirely live down even one hasty and ill considered act.

Care in observing the symptoms of weak arches and in finding varicose veins is of importance in assigning employés to work which requires much standing. Proper support for a part of the time with suitable exercises or other treatment should make the flatfooted more able to do general work and the afflicted applicant should be told the importance of seeking a skilled practitioner for diagnosis and advice.

The many people who suffer from varicose veins and who

have no idea of how to care for them is surprising. Once the opinion of a surgeon has been obtained and it is decided that support only is indicated, the care of such sufferers is surely work for a nurse. There is nothing a nurse can do which will be more appreciated than the teaching of those having varicose veins how to keep them supported while standing or sitting, impressing on them the advantages of a recumbent position whenever they are resting, and relieving them of anxiety by instructing them as to what should be done in case of rupture or if an ulcer should appear.

APPLICATION FOR EMPLOYMENT¹

BLANK AND COMPANY

9 North Fifth St., Seneca, Cal.

<i>Service Department</i>	Date.....
Name in full.....	
Address.....	Telephone Number.....
Place of birth.....	Date of birth.....
Married, single, widowed.....	Do you live with parents?..
Education (give details of highest grades attended).....	
.....	
Do you attend evening school?.....	
What studies are you pursuing?.....	
Position desired.....	Salary expected.....
Have you ever done such work before?.....	
Where.....	When..... Position held.....
Name and address of last employer.....	
.....	
Position held.....	How long employed... Salary.....
Date of leaving.....	Reasons for leaving.....
Name and address of previous employer.....	
.....	
Position held.....	How long employed... Salary.....
Date of leaving.....	Reasons for leaving.....
Other business experience.....	
If we are unable to give you the position desired at once, what position will you take temporarily?.....	
Recommended by... adv... sign... employment bureau	
References: Names and addresses of at least two, other than relatives.....	
.....	
.....	
Remarks:.....	
.....	
.....	
Signed.....	
Applicant interviewed by	
.....	

¹ Print on card uniform in size with other cards.

BLANK AND COMPANY

9 North Fifth St., Seneca, Cal.

Service Department

Date.....

M

Gentlemen:

Mr. Mrs. Miss..... has applied to us for a position as..... stating that..... was in your employ as..... from (date)..... in Dept., under Mr. Foreman; and that..... left (date)..... Any information you may give us regarding..... will be treated as strictly confidential.

Was..... employed by you for the period above stated?....

Skill { Good?.....
Medium?.....
Bad?.....

Production { Fast?.....
Medium?.....
Slow?.....

Character?.....

At what class of work does applicant excel?.....

Remarks:.....

Signed.....

Thanking you in advance in anticipation of a prompt reply, and assuring you of our willingness to reciprocate, we are

Yours very truly,
BLANK AND COMPANY,
Service Department.

Copy of application for employment for filing in waiting list and for use as a cross file after employment.

No.....	<i>Service Department</i>	Date.....
Name.....		
Address.....	Telephone No.....	
Age.....	Nationality.....	Single, Married, Widowed
Similar work elsewhere?.....		Where?.....
What process?.....		
Name and address of last employer.....		
Of previous employer.....		
Father's name.....	Nationality.....	

NURSE AND EMPLOYMENT OFFICE 111

Dept.....	PERSONAL HISTORY CARD ¹		No.....
Name.....	Citizen?	1st papers.....	2nd papers.....
Address.....	Telephone No.....		
Place and date of birth.....			
Relatives living? Father.....	Nationality.....		
Mother.....	Nationality.....		
Brothers.....	Sisters.....	Children (sex & ages).....	
Wife.....	Employed.....	Where.....	
Hus.....	Employed.....	Where.....	Citizen?
Wage Earners.....			

School Training: yrs. in U. S.....	yrs. abroad.....	Grade in U. S.....
Date of immigration.....	English, Speaks.....	Reads.....
Religion?.....		
Societies?.....		
Last employer?.....	Why left?.....	
Previous employer?.....	Why left?.....	
Assigned to.....	Dept.....	No.....
Operation.....	Wage.....	Date.....

HOME: Live at?.....	No. Rooms.....	No. occupants.....	Boarders.....
Sanitary condition.....			
Home visits by nurse (1st & last at each absence).....			
.....			
.....			
Remarks.....			
.....			
In case of accident notify.....			
Possible transfer to—Purch., Op., Stock, Design., Exam., Sales, Cut., Trim., Press., Ship., Mach., Clerical.....			

¹ Large cards—5 in. X 8 in.

Reverse side of personal record card.

Home visiting

Home visiting records may be kept on the reverse side of the personal history card. Supplementary cards ruled on both sides for first aid and for visiting nursing will provide extra space.

Where the nurse is permitted to gather and use the information indicated, this card or one modified to suit the industry will give a fair history of the worker, with the exception of his attendance and work records, which cannot be included unless the management allows the coöperation of the timekeepers and of those keeping the wage sheets.

A numerical file is necessary for filing the names of the workers by their identification numbers. This requires only name, department and number of each worker. A daybook for those applying, discharged and engaged will make possible the making up of monthly and weekly reports without tiresome sorting of cards.

The card, for the requisition of employés, states the requirements of the department and affords a record of the disposition of new and of the transfer of old employés. Plate A.

A wage and time card ruled on both sides will give a record of the hours worked and of the earnings of an employé for two years. Plate B.

A report devised to fit the industry and affording the information suggested in the following form will make possible the comparison of different departments and of the different years in the same department. Plate C.

An employer establishing or reorganizing a service department may expect the industrial nurse to suggest forms for other uses, such as identification cards and passes. Visiting cards, for the use of a nurse visiting in the homes or acting as a representative of the company in any capacity, are almost a necessity.

IDENTIFICATION CARD TO BE CARRIED BY
THE EMPLOYÉ

BLANK AND Co.
9 North Fifth St., Seneca, Cal.

Identification Card

Name.....	Clock No.....	
Address.....		
Issued.....		
Height.....	Weight.....	Hair.....
Eyes.....	Complexion.....	Beard.....
Mustache.....	Signature.....	
Employé.....		Service Department

SERVICE REQUISITION

DEPARTMENT _____ DATE _____

PLEASE FURNISH THE FOLLOWING _____ MALE _____ FEMALE _____

POSITION	WEEK WORK	PIECE WORK	DUTIES	HOURS
	MAXI-MUM RATE	RATE WISH TO PAY		

DESIRED QUALIFICATIONS _____

AGE BETWEEN _____ AND _____ EDUCATION _____

EXPERIENCE _____

OTHER POINTS _____

REPLACING _____ INCREASE IN FORCE _____

INTRODUCTION

TO MR. _____ DATE _____

INTRODUCING _____ FOR _____

SIGN _____
Service Department

If applicant is satisfactory insert only the date effective and rate and return to Service Department with signature.

If applicant is not satisfactory, show reason, sign opposite No. 1 and return in envelope to Service Department.

REJECTION NOTICE.

REASON _____

SIGNATURE 1. _____

NOTICE OF	NAME _____ NO. _____	
<input type="checkbox"/> Engagement		
<input type="checkbox"/> Re-Engagement		
<input type="checkbox"/> Re-Instatement		
<input type="checkbox"/> Transfer		
ON THE	ADDRESS _____	
<input type="checkbox"/> Private Payroll	DATE, EFFECTIVE. _____	
<input type="checkbox"/> Min'g Payroll	RATE _____	PER _____

DEPARTMENT	POSITION	
<input type="checkbox"/> INCREASE IN FORCE	<input type="checkbox"/> REPLACING	<input type="checkbox"/> RESIGNED
	<input type="checkbox"/> DISMISSED	
TRANSFERRED TO _____ DEPT. _____		

APPROVED:	AUTHORIZED:	SIGNED:
	SERVICE DEPT.	DEPT. MGR., PAYROLL MGR.

RETURN TO SERVICE DEPARTMENT AT ONCE.

Plate A

WEEK	DATE	HOURS	DATE	HOURS	DATE	HOURS	DATE
		EDDIE		EDDIE		EDDIE	
1		27		1		27	
2		28		2		28	
3		29		3		29	
4		30		4		30	
5		31		5		31	
6		32		6		32	
7		33		7		33	
8		34		8		34	
9		35		9		35	
10		36		10		36	
11		37		11		37	
12		38		12		38	
13		39		13		39	
14		40		14		40	
15		41		15		41	
16		42		16		42	
17		43		17		43	
18		44		18		44	
19		45		19		45	
20		46		20		46	
21		47		21		47	
22		48		22		48	
23		49		23		49	
24		50		24		50	
25		51		25		51	
26		52		26		52	

Occupation	191	191	Average Increase or Decrease	Total No. of Employees	EMPLOYEES WHOSE EARNINGS													
					INCREASED					DECREASED								
					Did not Fluctuate	1-2c.	3-5c.	6 or more	1-2c.	3-5c.	6 or more	No.	%	No.	%	No.	%	
					No.	%	No.	%	No.	%	No.	No.	%	No.	%	No.	%	
Presser																		
Scallop Cutter																		
Ribboner																		
Hemstitcher																		
Gown Operator																		
Corset Cover & Combination Op.																		
Princess Operator																		
Chemise					"													
Zig-Zag					"													
Skirt					"													
Drawer					"													
Lace Runner																		
Tucker																		
Merrow Machine																		
Ruffle Setter																		
Scalloper																		
Jap Embroiderer																		
Fancy worker																		
Total all Occupations																		

PASS

BLANK AND Co.
9 North Fifth St., Seneca, Cal.

Name.....	Pass Out.....	191.....
	Clock No.....	at.....
Reason.....		A. M.
With following articles.....		P. M.
.....	Signed.....	
	Dept.....	

VISITING CARD

MISS JANE A. SMITH, R. N.
Visiting Nurse

Secretary
Mutual Aid Society
Employés of Blank and Co.

A printed list of the conveniences, comforts and special advantages provided is sometimes given to each new employé.

BLANK & CO., 9 NORTH FIFTH ST., SENECA, CAL.

SPECIAL SERVICE TO EMPLOYÉS¹

We desire to make this establishment a most desirable place to work in, and to that end we maintain a Service Department, the object of which is to supply every comfort, convenience and safety to our employés.

1. We have a Service Director, a trained nurse, who devotes her entire time to overseeing our service to employés.
2. In coöperation with the City Public Schools, a class is maintained at the factory each day for the purpose of teaching the reading and writing of English to those who

¹ Copied almost verbatim from a circular used by Mrs. Claribell Hill.

INDUSTRIAL NURSING

have need for it. The Board of Education supplies the teacher, and the firm pays the girls for their hours in our school.

3. In coöperation with the City Board of Health, a series of health lectures is given in the Recreation Hall at the noon hour.

4. A first aid room is provided for employés who are sick during business hours, with a trained nurse in attendance.

5. A trained nurse visits sick employés in their homes if necessary.

6. The Service Director may be called upon confidentially for aid or advice in personal matters.

7. A lunch room is provided where employés may purchase wholesome food at cost prices.

8. A Recreation Hall is provided. Dancing and music are enjoyed here during the noon hour. A piano and phonograph have been installed for that purpose.

9. A free circulating library, a branch of the City Public Library, is maintained for the convenience of employés.

10. Current magazines will be found on the tables in the Recreation Hall.

11. Librettos and books on the operas may be borrowed when desired.

12. Special entertainment is furnished from time to time at the noon hour.

13. A dancing class is in session one noon a week where modern social dancing is taught.

14. Lectures are given twice a month at the noon hour in the Recreation Hall.

15. A popular Song Review is held once a week under competent direction.

16. A gymnastic class and a class in folkdancing are held once a week at the noon hour with a competent instructor in charge.

17. Dumb-bells, wands and a punching bag have been placed in the Recreation Hall, for the use of the employés.

18. A dressmaking class is held in the Recreation Hall one evening a week, under the direction of a teacher. A charge of fifty cents is made for five lessons, equipment being furnished by the firm and materials by the pupils.

19. A Vacation Fund is maintained where girls may deposit small savings toward their vacation expenses.

20. Bulletin boards are placed throughout the factory where notices and items of interest are posted.

21. Any employé who first suggests an improvement or any feasible plan for economy of any nature will be paid \$2.50 for each suggestion adopted.

22. A supply of umbrellas is kept for the convenience of employés which may be rented for five cents a day whenever needed.

23. A supply of stockings is kept for the convenience of employés which may be purchased for ten cents a pair.

24. All employés are given the benefit of wholesale prices on merchandise bought for personal use.

25. A monthly paper is published by and for the employés. "Threads and Thoughts," subscription price, twenty-five cents per year.

26. Several evening entertainments are given during the year.

**ALL WORK OF THE SERVICE DEPARTMENT IS DONE BY
COMMITTEES OF THE EMPLOYÉS IN COOPERATION WITH
THE SERVICE DIRECTOR**

Cooperation means success.

Please be quiet.

Do not make unnecessary noise in halls or on stairways.

Please be careful.

This is *your* business home. Be careful of it and keep it clean. Do not mark or deface walls or fixtures.

Please be orderly.

If you use a thing, return it to its proper place.

Please be reasonable.

There are nearly 600 people in this building who have the same privileges that you have. Do not do anything that would not be right for every one of them to do.

Please be clean.

Do not spit on floors or stairs. Spitting in public places endangers your life and the lives of your fellow workers. It is prohibited by the Board of Health.

An outline for the observation of the physical condition of the applicant for employment follows. If the items are printed on a card uniform with the other record cards and if the questions to be answered by the applicant are printed on the reverse side, a permanent record for filing is provided.

In planning a card for this purpose, if there is a physician, other than the family doctor, to whom the nurse is permitted to send cases which she thinks should be passed on by a doctor, he should be consulted and he would undoubtedly be able to make valuable suggestions.

Colored, White, Male, Female Married, Unmarried, Children, With parents
 Name Address Age
 Height Weight Age on entering industry
 T. P. R. Mouth Nose Throat Eyes
 Feet Corns Bunions Swelling Foot gear
 Legs Scars Varicose veins Swelling
 Edema Eyelids Legs Deformities
 Evidence of former injury visible
 Eyesight both r. l. Colorblind
 Hearing both r. l.
 Unsuited to Teeth { U. R. 12345678
U. L. 12345678
L. R. 12345678
L. R. 12345678
 Remarks
 Applicant observed by Nurse
 Ex. by Dr. Statement

Reverse side of card.

Name Date
 Have you ever had any of the following diseases? Fits
 Lung trouble Rheumatism Rupture
 What illnesses have you had?
 Have you any physical defects?
 Signed Applicant
 Remarks
 Employed Waiting List Rejected
 For observation
 To reapply after treatment After treating head
 With proper shoes Suitable dress
 Certificate from Dr.
 Medical history after employment, Transfers, etc.

Ear tests may be made with a "dollar watch." Standard cards for testing eyes, with instructions for their use, are obtainable from dealers in optical supplies free of charge or for a small sum. Color blindness may be tested with a card of sample colors to which the applicant matches small bits of the same colors. There should be several shades that do not correspond with the primary and secondary

colors on the sample card. Those shades intended to match should match exactly. For workers who will be expected to match delicate shades special tests will be required.

The first interview with the new employé is so important that an outline should be prepared which may be kept on the nurse's desk so that nothing may be forgotten.

OUTLINE FOR THE FIRST INTERVIEW WITH THE NEW EMPLOYÉ

I. Responsibility of the organization toward the worker:

1. Earning opportunity:
 - (a) Hours of work.
 - (b) Minimum starting wage.
 - (c) Wage system (piece, rate, task, etc.).
 - (d) Basis of promotion.
2. Regularity of employment:
 - (a) Providing of work and of exact positions.
 - (b) Scientific assignment of workers according to need.
 - (c) Teaching each worker several occupations.
 - (d) Security of position.
3. Policies and methods of coöperation.
 - (a) Purpose of service department.
 - (1) Adjustment of difficulties.
 - (2) Coöperation in the development of mental, physical and social well-being.
 - (b) Purpose of instruction department.
 - (c) Purpose of other departments.

II. Responsibility of the worker toward the organization:

1. Responsibility for the maintenance of proper physical and moral conditions:
 - (a) Value of neatness and order in surroundings.
 - (b) Wholesome moral atmosphere.
 - (c) Plain business dress and courteous manner.
 - (d) Democratic spirit.

2. Regularity of attendance:

- (a) One worker for each position.
- (b) Care of health with the aid of factory medical department. First aid, visiting nurse, etc.
- (c) Importance of home hygiene.
- (d) Importance of the avoidance of outside work.
- (e) Importance of regular hours and wholesome recreation.

III. The importance of character:

- (a) Essential to fitness and advancement.
- (b) Reasons for giving proper notice when quitting (bonus for notice).
- (c) Necessity for being patient and reasonable and for giving work a fair trial.
- (d) Frankness and promptness in presenting complaints and criticisms.¹

The correspondence of an employment office or of the nurse's office should be carefully filed. A convenient method for keeping the letters and other papers concerning any one employé with his other records is by means of a heavy manilla envelop of a size to match the record cards, having printed across the eight-inch side a space for the name, department and number of the worker. Where there are papers to be filed for only a few of the employés this method is sufficient. Where there are many papers for each sick worker, as when the visiting nurse delivers the sick benefits and keeps receipts, the envelop may be printed on both sides like the form for lower part of the reverse side of the personal history card. The outside of the envelop may then be used for visiting nurse records.

¹ This outline for the first interview with the new employé is taken almost verbatim from an address by Miss Mary Gilson, delivered at the Employment Managers Conference, Philadelphia, Pa., April 2 and 3, 1917. Bulletin of the United States Bureau of Labor Statistics, Number 227.

The employment department must be "built on a foundation of records"; the system must be just elaborate enough to give a complete picture of each worker and no more. The simpler the files the less chance of misfiling. A misfiled record may almost as well be lost. The records must be kept up to date as to the disposition of the workers, their hours and earnings and especially their change of address. The plan of having each foreman responsible for sending change of address to the office on the *second*¹ working day of each month seems to be the best way of keeping track of the, too often, frequent moves of the workers. If the person making a report of the illness of a worker can be made responsible for getting the correct address at that time, many fruitless errands will be avoided.

The records of the employment office as well as those of the first aid room and of the visiting nurse should be *confidential*. They should not be allowed out of the department, should be seen only by those having business with them, and should be kept in a locked case or in a locked room.²

¹ People are apt to move on the last or the first day of the month.

² A code system is useful for many entries. See Chapter X.

CHAPTER XII

THE INDUSTRIAL NURSING CENTER

Where one industry is responsible for the growth and existence of a town, the employer sometimes makes provision for more or less extensive public health and social work for the whole community. In some industrial villages this is done through a division of responsibilities, specially trained workers being in charge of each branch and the schools, recreation center, nursing center, etc., in separate buildings, or at least each one under the control of teacher, social worker, nurse, etc. In other industrial villages, schools, nursing, recreation and other activities are conducted from the same building with teacher and nurse as residents, coöperating in the management of recreations and other activities with the help of workers from the plant. Where the local authorities have the schools, recreations, care of public health, etc., in hand, the owner of the principal industry may still provide a nursing or health center of some sort. The center in many small industrial villages consists of a company hospital from which nursing and social work to a greater or less extent, is carried into the homes. The company hospital, however, has little use except in isolated communities where no general hospitals are available. Many employers and most employés consider that better general and special care is obtainable where the foremost physicians and surgeons are on the staff of a local hospital rather than in one controlled entirely by an industry.

Where no industrial hospital is necessary, a nurse's house is, in some towns, used as headquarters for all industrial nursing work. Often living quarters for the industrial nurse and her assistants are included. With a house of this kind,

many neighborhood activities are possible and, if there are no local agencies for public health education and social welfare, almost any recognized social measures may be handled, at least temporarily, by the staff of resident or non-resident nurses. If one nurse at least has social training and experience and has the social view point, social needs may be recognized and demonstrated and temporary or permanent methods for meeting them devised.

The only apparent drawback to the plan of a nursing center or nurse's house where the nurse lives is that the industrial nurse, especially if she is without assistants, will find little time for uninterrupted rest or for relief from the ever pressing affairs of other people. There must be some means of escape for the nurse, or fixed and regular times when she is "not at home." This is hard to manage. Neighbors cannot understand how anything can be more important than their own affairs, and if the nurse or her employer lack a sense of relative values, the nurse may find that she is using time she needs for rest, and much of her reserve strength, in work which, while comforting at the time to the person helped, is often of little real or lasting value.

If the staff is large and the employer willing, work may be so planned that it is possible for a nurse to sit up all night with someone beyond help or to assist a family physician with minor operations on Sunday or to attend an obstetrical case at whatever time she is needed. But the staff is seldom large enough for these demands and if the nurse allows her time and strength to be unduly taxed, her work in the plant and that which her employer expects of her in the homes, in addition to her own health, are sure to suffer.

Employers are reasonable when they understand. They do not want a worn-out or half-sick nurse. By supporting the nurse in resisting temptations or demands to do more than she can do well and by having the foresight to uphold her in a resolution to begin with these calls as they must ultimately be handled, they will help the nurse to preserve her usefulness and increase the efficiency of her work.

The industrial nursing center having been established, its growth is inevitable unless purposely limited.

There will probably be need for a first aid room, although it may be possible to have all such work done at the plant. The records of all the nursing work may sometimes conveniently be kept at the nurse's house. The nurse will find it advantageous or even necessary to set aside an hour in the evening for workers to come to her either for redressings or on their personal errands.

The needs of the visiting nursing service may call for the provision of a loan closet containing articles not found in the ordinary home, but needed when sickness comes. A circulating library will bring pleasure to many patients. In a small village such a library might be made to grow into a real public library.

The nurse on her rounds will find babies whose mothers do not know how to give them proper care. The efficient supervision of a large number of babies means, in addition to calls at the homes, individual talks with the mothers, home demonstrations in the preparation of food and in the care of the child, some central place to which the mothers may bring their babies at stated times for weighing, inspection and advice. Much follow-up work of a babies' conference of this kind is possible, with relatively little extra effort, by the industrial visiting nurse on her regular rounds. If she lists the homes where there are babies according to streets, it is an easy matter to see all the babies in a given district when other visits must be made on the same streets. Emergencies and special feeding instruction will, however, take more time.

A baby conference in connection with industrial nursing must differ in some respects from one managed by a charitable organization or by the board of health in a large city. Except in a very small, purely industrial village, baby welfare work, supported by the employer and not by local organizations, cannot in any sense take the place of an agency widely supported by all classes throughout the community.

In a baby clinic in a large city, a doctor is in attendance at

stated times even though he may refer babies needing medical care to family doctors. In an informal baby conference (better called "Babies' Day or Babies' Afternoon") connected with an industrial nursing center it is usually impractical, if not impossible, for local reasons, to have any one doctor in attendance. Some physicians in industry might have the time to give and the interest in babies which would make such a service a pleasure to them. However, the industrial nurse in most small villages must depend largely on her own ability to enlist the coöperation and support of the family doctor of each mother.

A plan, which has been tried with some success and with satisfaction to the local doctors who have happened to need the special help that a visiting nurse alone can give in the care of difficult feeding cases, will be described as suggesting a possible solution of the problem of the care of *well* babies in a small industrial village. Sick babies, necessarily having a physician in attendance if visiting nurse care is to be given, offer no additional problems in medical and nursing coöperation.

The industrial visiting nurse will find many young babies, children of workers, in her daily rounds; children whose mothers naturally remain at home after marriage and those whose mothers work as long as possible during pregnancy and who expect to work again outside the home as soon as they can do so after the birth of the baby. Consideration for the welfare of the next generation will urge an employer, in a town supporting no child welfare agencies, to allow the visiting industrial nurses time and opportunity for some, at least, of the so badly needed instruction of these mothers and for as much supervision of the babies before school age as is compatible with industrial nursing immediately and tangibly connected with the *present* welfare of the industry and the health of the *present* force of workers.

When the nurse has been given this privilege by her employer and can observe the improvement in the health, strength and happiness of the babies under her care, she

enters upon the most fascinating, absorbing and satisfying branch of industrial nursing.

At first the babies will be found in the nurse's rounds, but later the mothers will, in many cases, hail the nurse as she passes in the street or even bring their babies to the nurse's house. As the nurse's work becomes known, the opportunities for getting *well* babies under observation will increase. The local doctors will often refer mothers whom they have delivered to the nurses. Consultation of town or county records will, in the registration areas, give the births, and the nurse can make a call. No mother, however well she may understand the care of her baby, will resent one such call. Subsequent visits from the nurse and attendance at the baby conference will depend entirely on the wishes of the mother. Where registration of births is not complete, local newspapers will help in finding the babies. The interest of friends and neighbors will bring many cases to the nurse's attention, but the best advertisement will be the nurse's popularity, the word of mouth of mothers who are being taught, and the support of the local physicians who are known to be interested in child welfare.

The mother once found is invited to bring her baby to the nurse's house on the Babies' Afternoon. If she comes, the nurse will weigh and measure the baby and give enough general instruction to the mother to interest her, and invite her to join the Mothers' Class. A record will be made of the name of the mother's physician or of the physician who has delivered her and a card sent to him. This card should state that Mrs., delivered by him of a child (male or female) on....., 19.. desires to join the Mothers' Class at the nurse's house. The card should further state that mothers attending the class are taught the care and feeding of breast-fed infants and of normal children, that deviation from steady growth or any apparent abnormality will be reported to him at once, that no mother whose child does not seem to progress in a satisfactory way will be allowed to continue as a member of the Mothers' Class unless a phy-

sician is consulted and will direct the subsequent medical care of the child. The card should invite suggestions as to improvements in the work, and state that visits to the class by the doctor will be welcome at any time.

On instituting such a baby welfare service, a note sent to each local physician, explaining the motives and asking support and coöperation, is a courtesy which should be appreciated by the medical profession. If such a note is sent out by the employer, his backing and interest are made plain.

In teaching the mothers, stress should be laid on the simple everyday care of *well* children, the advantages of breast feeding and when and how to give additional food, the need of cleanliness and how to attain it, the necessity of fresh air and exercise, proper clothing and suitable play and the right of every child to the care of its own mother in a real home. Ignorance and desire for additional money, not need or lack of mother's love, are in many cases, the causes of the presence in industry of women who would, if they but knew it, be of much more value to family and nation if they refrained from gainful occupation outside the home until the youngest child reaches an age when a mother's care and a home is no longer a *necessity* to his well-being. A nurse can often prove this fact to individual mothers through her care of their babies, and it is not at all unusual for a woman to say that she has decided not to go back to work after the birth of her child because she is sure her baby will not have the care she has learned to give it.

One of the greatest pleasures the writer ever experienced was the sight, one autumn day, of a street in a poor quarter of town. The preceding summer it had been difficult to get the mothers to think they had time to take their babies out of doors, and often the babies had been placed out for them. It happened that every mother on the little street attended the Mothers' Class and that nearly every house boasted a young baby. On the particular day in question, ten small babies within sight were out of doors in boxes, gocarts, pens and on the floors of porches. Supper was delayed for some time, a

call was made on each mother, and neighborhood gossip disclosed that the mothers felt it did pay to do all these things for the babies, for in spite of a hot summer, not a baby on that street had been sick.

When a baby does become sick, a nurse can do much to secure and keep proper medical supervision by encouraging the habit of employing a *family* doctor and discouraging the unfortunate drifting from one physician to another which some persons consider necessary when a sick member of the family is not immediately relieved by the first doctor called, and which physicians find so discouraging in their efforts for the relief, cure and education of their patients.

This plan for the supervision of well babies is not by any means perfect, but it has been described because the writer has not been able to discover any better. Where it was last known to have been tried, it was meeting with very real success in keeping well babies well. While, in the beginning, the work of the industrial nurses was observed by the local physicians with great indifference, during the latter part of the first summer and to a greater extent during the second summer, both well and sick babies in such large numbers were referred by the local physicians to the industrial nurses that it was only with great difficulty they were able to respond to all the requests for help. At the end of the second summer most of the physicians were ready to try as a general community agency, the plan of a community baby conference to extend the work already being done by the industrial nurses. This was specially gratifying, as a milk station had been in existence for one summer before industrial nursing had been established and was abandoned because the local physicians considered it not suitable to their needs or to the needs of the community.

Prenatal Supervision by Industrial Nurses: The proper care of mothers during pregnancy and labor, is now recognized everywhere to be the logical beginning of baby welfare work, and the industrial nurse, through her knowledge of industry, as well as of home conditions, cannot afford to ignore her

special opportunities to advance the cause wherever her work lies. A large community often offers opportunities for coöperation in this field with existing agencies, but, in the small industrial village, such agencies seldom exist and the nurse may be obliged to make the first step herself. The support of her employer may depend on the presentation of a workable plan which will not demand much additional time, funds or space. Fortunately such a plan is perfectly practical and may be carried out with little additional effort by industrial visiting nurses who already know the town and the workers and who have a better chance than other visiting nurses for finding, in the early months, a large proportion of pregnant women in the industrial group.

Women employés, who become pregnant, are usually forced to remain at home for a time in the early weeks even though they return to work later. Where a system of prompt visiting is carried out the visiting nurse is sure to see these women. The nurse in the plant frequently discovers pregnant women. Others are found as she goes into the homes on other errands. As the interest of the nurse becomes known, women come to her, and husbands who are employés will sometimes ask the nurse to see their wives even though the wives do not work. Few women of the working classes consider medical care necessary until labor begins, but the visits of the nurse are always welcomed. Much may be done, in a very informal way, by simply advising any expectant mother seen. All interested visiting nurses do much of this sort of casual teaching as they go about and, as it is so casual, little note and probably no record is made of it. Valuable as this passing attention is, a much wider and more lasting good may be accomplished by a little effort for thoroughness.

Needless to say the first duty of the nurse who is consulted by a pregnant woman is to discover whether she has seen her physician and if she has not, to persuade her to do so at once. Patients often hesitate, fearing the expense. Coöperation with the local physicians helped to solve the question for one

industrial nurse. The objection of the women was stated to them and they all agreed gladly, at the suggestion of one of their number, to rebate, at the time of delivery, all charges for office visits made by the women solely for medical observation of normal pregnancy. Early consultation enabled them to plan their time more economically, to say nothing of greater ease to both doctor and patient at the time of delivery.

A nurse is often welcomed by the doctor, after he has examined the patient, for her ability to observe untoward symptoms, make routine urine examinations and give general instruction to the woman in the care she should take of herself and the preparations she should make for her confinement and for her coming child.

An afternoon at the nurse's house set aside for these women, when many are being supervised, will lighten the labors of a nurse already well occupied. Many of them will gladly call on the nurse if they are sure they will only meet other women in the same condition. The routine urine examinations may then be made and the necessary instruction given in groups or singly. In one visiting nurse center, where prenatal care is given, the women are taught to make baby clothes and to prepare all pads, etc., for the delivery. The women furnish their own material but are taught to use old linen for pads, to make over clothes for the baby and any other economical measures that appear practical.

One of the greatest services a sympathetic nurse can render a young and probably frightened expectant mother is to give her an understanding of what is to come and inspire her with confidence that she will endure the trial well and quickly forget it.

If confidence in the nurse is well established during the expectant period, the subsequent supervision of the child with assured breast feeding and care by its own mother is much more likely to be accomplished.

Visits to the nursing center both by pregnant women and by those with children are of additional benefit by getting

mothers and babies out, and discouraging the close housing of the little ones in the winter time. A little air of festivity on afternoons given up to this work will make for their seeming importance in the eyes of the mothers. A hot drink in winter and a cool one in summer will also prove an attraction and, after a busy morning followed by the walk to the nurse's house, may even be needed by both pregnant and nursing women. Where there is no fund for purchasing refreshments and possibly in any case, a small sum from each woman (perhaps in the form of weekly or monthly dues) would provide the necessary food and also give the mothers a sense of responsibility in the upkeep of their class. Weekly committees might be formed among the women, each providing the refreshment for one afternoon.

The Industrial Day Nursery:—A so-called welfare agency carried on by some employers before the Great War and by more since deserves mention. Day nurseries, whether provided by employers of labor or under local charitable or commercial management, offer, at best, a poor solution to the problems of mothers of families without a breadwinner. With the growing realization of the child's value to the state and the advantages of a normal home in his physical, mental and spiritual development, together with the extension of state-supported mother's pension systems, we may see the time when a day nursery, even for fatherless children, will be as much a thing of the past as the old time poor farm care of orphans in a progressive and enlightened community. When the natural breadwinner of a family is living and healthy, something is wrong in a social system that drives or coaxes the mother of his young children into gainful occupation outside her home. The trend of legislation shows that public opinion is being roused to the fact that a young child has a right to the care of his mother in a real home, even though the state, by pensioning the mother, must take upon itself the responsibility of the deceased breadwinner.

Some socially minded employers of labor realize that they would only defeat their purpose by giving women work to

the detriment of their families. Certain others argue that, if the children have good care and suitable food in a day nursery at the plant, no harm can come from the employment of their mothers.

Until public opinion fully recognizes the mutual need of mother and child for each other and the disastrous results to individuals and to the race of separating them, industrial nurses will sometimes be asked to aid in the management of industrial day nurseries.¹

¹ DAY NURSERIES IN FACTORIES

The War Labor Policies Board has adopted a resolution setting forth the Government's attitude toward the employment of women in war industries. The principles embodied in this resolution have been approved by all the production and distribution agencies of the Government. Paragraph 3, Section 3, of the resolution reads as follows:

"The recruiting of mothers of young children for war industries should be discouraged."

"The object of establishing day nurseries in factories is obviously to increase and facilitate the employment of mothers of young children. The National Consumers' League has always protested against the establishment of such day nurseries, as one item in its campaign against the employment of mothers of young children.

"The objections to such employment are manifold. Some of the most important being:—

- "(a) A young child normally belongs with its mother in its home. Whatever tends to transplant either or both to the factory, tends to dismember the home to the injury of both mother and child.
- "(b) In peace time the one valid reason for the creation of day nurseries is that many working class mothers are temporarily disabled by suspected tuberculosis, or insanity, or are in the hospital for confinement or for surgical care, and the father cannot keep the household together unless there is a day nursery to tide over the crisis until the mother's return. There is no suggestion that day nurseries in factories have any such basis.
- "(c) Institutional care of children is, under all circumstances, to be avoided, if any better way can be found; and mothers' pensions, funds-to-parents acts, the Red Cross Home Service, and numerous scholarship funds for school children in the elementary grades exemplify better ways of providing for the children than the best day nursery even outside of a factory.
- "(d) If the excuse for having a day nursery in a factory is that mothers of young children are indispensable to present war production, the burden of proof is on all who make this unproven assertion.

"So long as there are any cherished daughters of suitable age

If the employer finds no other immediate solution of his own difficulties and those of the working mother, and the employment of mothers of little children is a fact, then, unquestionably, it is the duty of the industrial nurse to make sure by every means permitted her that the children and their mothers have all that is possible in the way of care, comfort and consideration. An investigation into the disposal of the children while their mothers are at work should be made. With no day nursery accessible, the babies are rarely left where they will have as good care as their mothers would give them and almost never are they treated with as much love and patience. No matter how poor a mother a woman may be, she nearly always leaves her baby with another woman a little dirtier, a little more impatient, and with less affection for the child.

If we admit that the baby must suffer by the separation, what about the mother who must rise early, prepare breakfast, wake, dress and feed her babies, perhaps wash or iron, do a little casual housework, take the children to the neighbor or to the nursery and be at her own work at seven o'clock? At noon she may rush home to nurse the baby or she may be obliged to suffer until night because she cannot do so. She can hardly avoid losing her milk. If she is a normal woman, she cannot escape constant anxiety about her child. At night she reverses the work of the morning. She goes for the children, takes them home, prepares supper or brings in an unwholesome something from the store, puts the babies

for it in comfortable homes, every exertion should be made to get them to do factory work, before any mother should be asked to take her little child to the factory. Masses of colored men and women, eager to get into industry and now discouraged from doing so, should be employed in preference to mothers of young children.

"Until these sources of labor power are utterly exhausted, the Consumers' League will continue its earnest protest both against mothers of young children going to the factory themselves, and against their taking their little ones with them. Such day nurseries are a hideous perversion of philanthropy, a travesty of charity." FLORENCE KELLEY.
September 25, 1918.

From *The Churchman*.

to bed, sews, washes, irons, cleans until she is forced to drop into bed. Perhaps her rest is broken by a nursing baby, older children may disturb her and she will probably be too tired to sleep well. She gets farther behind with her work each day, takes less care in preparing food, finds herself unable to do all that she wants to do, grows discouraged with the endless grind and finally becomes sick. The writer has for years watched many young mothers in industry and a recent review of their names shows few who were able to keep up the pace. Where the husband did not or could not support his wife at home, the almost certain outcome was that the children, or mother and children, became charges on public or private charity. Had they been helped to lead normal lives, this might have been avoided. As it is, tuberculosis, nervous breakdown and other misfortunes have claimed many mothers, and their children who have survived are growing up in institutions or are struggling for self-support without mental or physical preparation. Proper care for mothers and children without breadwinners should be provided by the state. Mothers' pensions should be provided for and accepted by those needing them in the same spirit that the public schools are provided by the state and accepted by all classes.

Where mothers of young children are employed, the supervision of the care of the children may be accomplished in two ways:—by the day nursery and by carefully selected and supervised boarding places in the neighborhood of their homes. The industrial nurse who visits in the homes should make it her business, if her employer will permit, to visit the children of mothers who are employés and work out a plan for systematic oversight. The mothers will be appreciative and many caretakers will take pride in their work when they are aware it will be noticed and that the mother will be informed when her child has good care, as well as when it is neglected. In a small plant in a small town, the few babies requiring supervision may be seen while making the regular daily calls. In a large city much time and effort

must be expended in searching out all the babies left with others by their working mothers. Careful coöperation with the employment office and interviews with all new women employés, and with any returning after an absence, should discover those with young children. Coöperation with nursing and child welfare agencies will do much.

But the whole thing is wrong, and the industrial nurse who is alive to her responsibilities and to her privileges will spare no pains to enlist the sympathy and understanding of her employer and aid in the forming of a consistent policy which will result in the exclusion of the mothers of little children from industry. Here the records may help to point the argument. If a special file is¹ kept for the disabilities and work records of employés who are mothers of young children, it cannot fail to yield valuable facts as to the injuries sustained, illnesses suffered, time lost from other causes and the amount of their output as compared with women having less heavy responsibilities.

Persons drawing up bills for proposed health insurance laws should have this subject in mind together with that of maternity benefits for working mothers.²

If, for the present, there must be industrial day nurseries, the industrial nurses should be ready to help make them places which will, as far as possible, provide the children with all they need during the day:—light and air, suitable food and clothing, protection from the danger of infection, means for wholesome play and instruction, and the understanding care of attendants who truly love children.

In some cities the construction, equipment and management of day nurseries is controlled by law. If the employer provides a day nursery, it should have the careful supervision of the industrial nurse. All children should have a physical examination by the doctor before admission. They should be inspected daily by a nurse to see that they are clean, well fed and happy, as well as for the prevention of contagion.

¹ See Chapter X, Records.

² See footnote, Chapter I, page 6.

They should have periodical reexaminations by the doctor and should receive whatever medical or surgical care is indicated. No child under six months or over fourteen years should be admitted without special recommendation and investigation.

There must be separate toilets for boys and girls old enough to run about. Plenty of space (at least 300 cubic feet for each person)¹ must be provided. Window space at least one-eighth of the floor space is necessary for light and air, and the windows should not open on courts or narrow streets. No basement rooms should be used. There should be an isolation room, a room with cots for naps, and space for play, indoors and out.

No common toilet articles must be allowed. Each child should have towel, wash cloth, tooth brush and cup and they should be numbered to correspond with the hooks on which they hang. Each child should be identified with the number used for his own articles. Dining tables should be attractive and the utensils should be handled in a sanitary manner.

Proper diets must be planned for all ages, and special care must be given to the preparation of artificial or supplementary feedings for infants of nursing age. The coöperation of the company physician or of some baby specialist is essential in the feeding of the babies, the prevention of malnutrition and the treatment of undernourished children.

Provision should be made for supervised play and for instruction suited to the age of the children. Those of school age will probably be in the public school during school hours. Older children may get something of the feeling of a normal home by being given some instruction in the care of the little ones, and a measure of responsibility for their welfare.

Any one who establishes a day nursery has responsibilities other than the physical care of children. Since it has been proved that dependent children do far better in the homes of women who, even if poor, give them affection and a normal

¹ Minimum legal requirement in Cleveland.

home atmosphere, than in institutions however elaborate, no one with any understanding of the needs of childhood will be satisfied with a social or industrial program which makes it possible to separate any little child from a healthy, affectionate, normal mother while she is forced or enticed into work outside her home.

Little Mothers' Clubs.—The many young girls in industrial villages who must have more or less of the care of younger brothers and sisters will gain much in capability and self-respect if they can be given some training in the care of children at the industrial nursing center. A little mothers' class, organized on the lines of those already in existence,¹ will be the means of teaching these young people not only to give better care to the younger members of their families, but will also teach them to be more intelligent mothers when they have babies of their own. A group of young girls organized into a club might be of great help to the community by watching out for the welfare of all babies and bringing to the nurse's attention those who need her care.

Further development is possible along similar lines, as home nursing classes, Red Cross courses, and lessons in cooking and sewing. The nurse may find fellow workers in the plant who are able and willing to teach others. For instance, in one department store, the milliners teach millinery in the women's club classes. Men may be found who are natural leaders and who will gladly organize the boys and men for recreation and study. Although not so common, such leaders may also be discovered among the women and girls.

Recreational, educational and general welfare activities, in order to hold the interest of the people, should originate in the needs and conscious desires of those to be served. If the people are drawn into the actual work, led to think and plan for their own welfare, they will profit by the use of the nursing center as a community center. To this end the natural leaders of the people must be discovered. An up-to-

¹ In New York City such clubs are managed in connection with the school nursing.

date periodical, edited and published by the employés, is a great help in stimulating interest and in forming opinion.

Coöperation between employers and employés is thought by many to hold the solution of most of our industrial problems. In no field can this coöperation be made of more value than in industrial welfare work. The plan, followed in some organizations, of having such work in charge of committees chosen by representatives from all departments offers opportunity for getting the real opinions of the workers. The industrial nurse who is so fortunate as to be identified with a firm practicing such coöperation enjoys many advantages over one who is employed and directed by one group of persons while she is expected to serve an entirely different class of people.

The House:—If the industrial nurse has an opportunity to assist in the planning of the nursing center she may be able to add to its suitability to the work and to its comfort as a dwelling.

A house approaching in general appearance the better houses in the neighborhood is more in accord with the work contemplated than a pretentious structure. The comfort of the residents will be enhanced by living quarters separate and away from the parts of the house used for other purposes. A living room and a dining room, or a room to be used for both purposes, a bedroom for each resident, a kitchen and bath and probably a room for a housekeeper will be needed. A larger place will offer no more comforts and will add materially to the housekeeping responsibilities.

No general plan seems to fit all the varied needs of industrial villages. Where the nursing center is to be used as a general community center a useful nucleus consists of a reception room, an assembly hall, a first aid room, office, and possibly a rest room. With a sufficient staff use would be found for a model apartment for teaching housekeeping and for class rooms.

Public baths, swimming pools, canteens, clubrooms, dance halls, bowling alleys, ball grounds, tennis courts, gardens and

other means for recreation and advancement are provided by some employers. In a welfare, industrial or community center of such extent, a manager of special executive ability is required. A nurse assuming such duties would necessarily have on her staff a number of assistants. There is no reason why a nurse of executive ability should find the management of such a center any more difficult than the management of a large hospital.

In the foregoing chapter, the aim has been to describe, with as much detail as possible, a few activities in connection with industrial nursing centers which have responded to the pragmatic test of Mr. Dooley, that "they work," to suggest what employers are trying out with the help of industrial nurses, and to indicate what may be the logical development, in some towns, of the industrial nursing center as a community center as well as a health center.

CHAPTER XIII

FOOD

A COMPANY LUNCH ROOM AS A CANTEEN AND AS A CLASS- ROOM FOR INSTRUCTION IN HOME PROBLEMS

A discussion of industrial nursing would be incomplete without special mention of the opportunities of the industrial nurse in furthering the provision of proper food for the workers and in educating them in the principles of nutrition.

The first aid nurse and the visiting nurse will discover in the improper feeding of children, mothers and workers one of the main causes of inefficiency, unhappiness and ill health. Where there is no canteen service for the workers the industrial nurse should soon have a variety of recorded facts to show the economic value of the provision of well-planned warm lunches in clean, comfortable surroundings.

In trades where poisons, such as lead, are used, it can be shown that workers, eating meals at their machines, or in corridors, do so without washing, and poisoning may be traced to this cause. It may be proved that piece workers do not rest during the noon hour if allowed to eat in their work rooms. A study may be made of the afternoon output of those who remain at their machines and this may be compared with the output of those who lunch outside. It can sometimes be shown that "horse-play" in the plant during the noon hour is responsible for accident to workers and for injury to machines. Delicate materials are often injured when the workers do not leave their places to wash and eat their noonday meal. Immoral conditions have been made possible by allowing workers to wander at will through temporarily deserted parts of the plant.

Even if no direct injury to workers, output or equipment

can be shown, the cost incident to continual war on the inevitable rats, mice and cockroaches should be placed in the balance. Undoubtedly, bits of food left carelessly lying about the plant after the workers have had their lunches will attract these dangerous pests.

Most labor laws provide for a lunch period of from forty-five to sixty minutes and, unless the workers go to their own homes for a warm meal, and for change of air and relaxation, a company lunch room is essential for their health and well-being, for the protection of materials, machinery and plant, as well as for the maintenance of the maximum output. It should be clearly understood that the efficient lunch room is not a charity. *It is an essential part of the equipment of the plant.* It helps to keep the employés from the pastry shop with its rich starchy foods and from the soda fountain at the corner drug store. It is so closely associated with the prevention of industrial injuries and disease that, unless it is managed by a trained and experienced dietitian, the lunch room is the legitimate concern of the industrial nurse. Many nurses find it possible to supervise a lunch room in addition to other duties. In a large plant, however, the management of the company canteen by the industrial nurse would require special training or experience as a dietitian.¹

Physical examination of the lunch room employés should be required. Even workers who assist in serving during the busy hours, but who are charged to other departments, should be examined by a physician. This should be done primarily for the protection from infection of those eating in the lunch room, but in addition the examination might easily yield results in the discovery of remediable conditions, in the adjustment of work to workers and of workers to work which would prove the economic value, both to the workers and to the employer, of general physical examinations as a routine policy. Proper toilet facilities for the lunch room employés must be provided. It must be made easy for them to keep their hands clean and someone must see that this is done.

¹ See Chapter IV, page 20.

It seems to be the general policy of employers who provide lunch rooms for their workers to consider the space, equipment and often part or even all of the service as a legitimate overhead charge for the plant. Some employers provide the lunch also without cost to the worker. In most plants, however, the workers are charged a sufficient sum to cover the actual cost of raw food as well as the cost of preparation and service.

Employers sometimes give or sell the privilege of supplying the food to local caterers. By this plan both the employer and the employé are almost sure to be exploited. The lunch room should not escape being a charity to become a money making scheme for some outsider. Unless the company considers the noonday meal of enough importance to provide for at least part of the expense, just as it provides chairs and clothes lockers, it will be necessary in fixing prices to allow a larger margin for accidents, sudden change in market conditions, etc.

Some employers put the management of the lunch room in the hands of a committee of workers, a plan which has been known to work to the satisfaction of everyone. One such committee manages the finances of the lunch room so wisely that the receipts cover the cost of food, service and breakage, and there is also a surplus which pays for publishing the employés' newspaper, for the expense of the monthly dances and often for other amusements. The prices are so low and the food is so good that a visitor finds it hard to believe that any money can be left over after paying for the food and service. The employés of the Bureau of Engraving and Printing in Washington conduct a lunch room with space and equipment provided by the bureau. That this is successful is shown by the fact that seventy per cent of the employés patronize it. The management of a lunch room by a committee of employés can only be successful *if they see the wisdom of expert supervision of the actual catering.*

The plan of figuring the overhead charges not assumed by the company such as management, service, etc., and making this a fixed charge to each patron has been tried. This fixed

charge is found by computing the cost of management, service, breakage, etc., making an allowance for error, accident and depreciation. The sum found in this way is then divided by the number of meals served during the same period. To the fixed charge is added the actual cost of the raw material of each portion ordered and the sum is the cost of the meal to the worker.

*Specimen Meal Check*¹

Fixed charge	.07
Beef stew	.09
Potatoes	.02
Turnips	.01
Spinach	.03
Bread	.01
Butter	.01
Ice cream	.04
Coffee	.01
Milk for coffee	.01
<hr/> Total	.30

On the other hand, there may be patrons who bring most of their lunch from home, and buy only soup or a beverage. If the entire fixed charge for service is added to their bill they will complain and say that a disproportionate amount is being charged to them. This plan is suggested.² Obtain the figures for the total overhead charges and for the raw food cost for any given month. Determine the percentage of total expenditure spent for food and for overhead. In the above check the expenditure for food is 23c. and fixed charges total .07. That gives a proportion of approximately 3 to 1. Then for every .03 spent for food .01 should be added for fixed charges. Experience has shown that bread and butter or coffee and milk are usually taken together, so that the objection that less than .01 would have to be charged is not a serious one. The menu chart would then read:—

¹ These prices are for illustration only. Unsettled market conditions in 1919 forbid any inclusion of price lists for guidance.

² Miss Katherine A. Fisher, Instructor in Household Arts, Teachers College, Columbia University, kindly revised part of this chapter and the suggestion is hers.

<i>Menu</i>	<i>Cost</i>	<i>Fixed charge</i>
Beef stew.....	9c.	2c.
Potatoes.....	2c.	1/2c.
Turnips.....	1c.	1/2c.
Spinach.....	3c.	1c.
Bread.....	1c.	1/2c.
Butter.....	1c.	1/2c.
Ice cream.....	4c.	1c.
Coffee.....	1c.	1/2c.
Milk for coffee.....	1c.	1/2c.

The plan might be roughly stated as follows:—

.02 service charge added to any dish costing .05 to .10.
 .01 " " " " " " " " 0.2 to .03.
 .01 " " " " " " " or combination of
 dishes costing from .01 to .02.

The lunch room offers many opportunities for teaching the principles of nutrition. Where the full lunch is provided by the company without cost to the worker it may be made a highly nutritious meal. The workers will partake of most of the dishes and will be assured of at least one well-balanced meal a day. They are more liable to form good food habits when good food is put before them. On the other hand, if the worker pays the cost of the food, he must be free to buy what he will. He may wish to bring part of his lunch from home and supplement it in the lunch room. False ideas of economy or perverted taste may prevent his buying what he needs. Some lunch room managers say they cannot educate the workers in the choice of food, but others have had a degree of success. The power of suggestion plays an active part here. Sometimes an appeal to the general desire to get a "bargain" is successful. If the items of food are charged for at one price when ordered singly, but are given at a noticeable reduction when served as a meal in specified combination, many workers will buy a proper lunch and will unconsciously form the habit of eating a good meal.

Industrial nurses and dietitians may also use the lunch room and its equipment as a class room in which to give to the women and girls instruction in the care of their homes and

children and in food preparation. In communities where girls go to work at fourteen, often not having reached the sixth grade, they have little opportunity for learning how to keep a pleasant home and to set a good economical table. Almost every woman likes to cook, especially if she has an appreciative father, brother, husband or sweetheart to feed. If the use of the kitchen, therefore, with light, heat and equipment is allowed for an hour and a half or two hours after the plant closes, cooking and housekeeping classes may be formed and carried on without any further expense to the company. For a small per capita cost the class can provide its own materials and dine on the food cooked. Careful planning of the lessons will make this possible even from the first day.

Some firms distribute circulars of advice as to the choice of food at different seasons of the year, but the real value of such casual means of instruction is open to debate.

If even a few people can be led to acquire the habit of eating good food, a good deal has been accomplished. If young girls can be taught to like to cook and care for a house because they know how, the health of the next generation will be largely assured.

There are a number of books which will help the industrial nurse who must manage a lunch room and who can use its facilities in teaching the girls to cook.¹

In many homes the visiting industrial nurse must teach dietetics because that is the one thing needed to improve the condition of the adults, maintain the health of the children, and perhaps to make possible the natural breast feeding of the family baby.

In dealing with people from other lands we must not forget their native customs and preferences. The natural food habits of any race which produces a large percentage of healthy individuals are probably based to a large extent on

¹ See Bibliography for list of valuable publications which will help the industrial nurse in dealing with the home problems of the workers. This chapter can only be suggestive of the possibilities which the nurse will find for service in this field.

sound dietetic principles. It would be folly to impose a diet of baked beans, Boston brown bread, apple sauce, and plain boiled beef and vegetables on the Italian who has thrived for generations on green leaves of many kinds, oil, fruit, pastini, cheese, and vegetables and meat served with highly seasoned sauces. He may better be encouraged in getting what he likes. The danger is not in his native diet but in the expense or scarcity of the foods to which he has been accustomed. This may cause him to adopt other and less wholesome habits unless he is made acquainted with suitable substitutes. Even the custom of giving unsuitable food to little babies is not common when the mother has food she likes and which nourishes her, as her baby is then breast fed and, being comfortable, he does not cry and the mother does not strive to quiet him by fair means or foul.

The Polish people coming largely from farms where they had milk, cheese, bread from the whole grain, and vegetables in abundance, are bewildered at the cost of these things in cities. The women have worked in the fields at home, spending little time in the preparation of food. Here they work in the mills as a matter of course. Instead of milk, cereals and vegetables—products from their farms—providing a naturally well-balanced diet, the nearest store offers nice *white* bread, cooked meats, nut butter and coffee. These foods do not provide adequately for the growth of their children, and the absence of bulky foods results in sluggish, disordered digestion, with the resulting headaches and other symptoms of autointoxication.

The industrial visiting nurse should have a working knowledge of dietetics, and should know in general the kinds of foods required for the growth of children and the health of adults. She should understand the sources of protein, mineral matter, fats and fat solubles, and carbohydrates, and how these may be combined in our common foods to form a nutritious and adequate diet.

We must teach the mother the value of her work in the home; we must foster the back yard garden and teach the

preservation of its products; we must show the value of milk (even of goat's milk if there is room for a goat); we must not thrust aside as of no value any racial food custom. We can soon distinguish between habits recently acquired through ignorance or for convenience, and customs of proved value. If we can show real understanding of these racial customs we will often get a hearing in our efforts to introduce more important American ideas. If we can introduce the Italian salad, the French soup, the hard whole-wheat Swedish bread and the Hungarian stew into the home of the average American worker we will do a national service, and we will in no way retard the Americanization of the foreigner who has added to the variety on our national table.

Attention may well be called to two recent publications which deal with the subject of the industrial canteen and which give definite information concerning this problem. One is "Welfare Work in British Munition Factories" (see Bibliography) which considers in some detail Canteen Construction and equipment, with suggestions as to suitable dietaries. The other is "Restaurant Facilities for Shipyard Workers" (see Bibliography) which goes thoroughly into the question of floor plans, equipment and menus and gives reports from various industrial concerns throughout the country who have found the canteen an essential part of their work.

For a study of food values, presented in such a way that the lay person may easily use it as a reference, such a book as that by Professor M. S. Rose on "Feeding the Family" is of valuable assistance. Food tables are given showing the nutritive value of foods by "100 calorie portion," method and also the value of dishes in everyday use. "The Newer Knowledge of Nutrition" by Professor E. V. McCollum is true to its title and sets forth very clearly some of the later data that has been worked out in regard to the essentials of a "protective diet."¹

¹ Teachers College, Dept. of Household and Institution Management will be glad to aid the industrial nurse in pointing her to sources of definite information concerning canteens and home management problems.

CHAPTER XIV

A FEW QUESTIONS WHICH MAINLY CONCERN THE INDUSTRIAL NURSE HERSELF

Before taking a new position, an industrial nurse will do well to consider certain things and to take certain precautions in order to avoid future misunderstanding or disappointment. Important points such as salary and any promised increase, vacations, etc., should be stated to the nurse in writing for her protection in any future change of administration. This does not mean a contract but simply a letter confirming the decisions reached in an interview. Most employers and nurses consider contracts unwise. No nurse would wish to remain where she was not acceptable and no employer would wish to retain a nurse who was dissatisfied. Of course an understanding as to reasonable notice of leaving should be reached and no nurse is justified in resigning, for her own advantage, any position until she has so organized her work that it may be carried on after she leaves without setback or loss of efficiency. She will be judged as much by what she leaves as by what she has done.

The nurse may be engaged by the busy president or other official of a company, but a personal interview with the person at the plant to whom she is to be responsible is most desirable. The nurse will then have a chance to know what is expected of her and to show her attitude toward the work. Misunderstandings may come from the omission of this precaution. During the interview, manager and nurse should discuss the relation of the nurse to the company physician, the limitations of the nurse in giving medical care and, to some extent, the question of coöperation with other departments and with local agencies. It is unwise to crowd too

much into this first interview. Its main advantage is that it gives each a chance to decide if they have the same general aims and can reasonably expect to work in harmony.

A preliminary interview with the company physician is desirable for exactly the same reasons.

The nurse must take care that she shall not find herself in the position of a substitute for a physician; that she shall not discover after beginning her work that the person to whom she is directly responsible has different plans from those of the person who engaged her; that she shall have at least a reasonable amount of coöperation from the beginning and that she shall be allowed some initiative.

Too much must not be expected at first. The nurse must prove herself worthy by doing well what her employer considers her duties before she can reasonably expect others to have much confidence in her ability for wider usefulness.

An inspection of the plant before taking a position is interesting but not necessary and might prove discouraging. The least attractive place needs the nurse more than one which seems ideal. Much that seems forbidding to an outsider takes on a different character after one is acquainted with the industry. If the nurse feels *sure* of her employer, of the general manager, welfare superintendent or other member of the staff to whom she is to be responsible, and of the company physician, she may safely take a plunge into a new position without much further investigation. She will be saved from worrying over difficulties she may never have to meet if she confines her knowledge of the plant to what she is told, until she has entered the work and is in a position to learn for herself. The hurried inspection of a large plant leaves one confused, but the slow accumulation of a little knowledge each day gives, in time, an understanding of the industry.

Some nurses may wish to make a careful inspection of the community. Others, more courageous, may like to go on a voyage of discovery, feeling that they may be more needed in unattractive places. In primitive communities, where com-

fortable quarters for the nurse may not exist, the company employing her should see that a suitable place, at least temporarily, is provided. A nurse cannot be expected to do good work and help to raise the living standards of others unless she is comfortable herself. The fashion in some mining villages of giving the nurse a company house and a salary too small to afford household help is unfortunate. Much time must be spent in the care of her home which should be given to her work or which she needs for relaxation.

The question of dress should be considered before taking an industrial position. A uniform adds dignity to the nurse, makes it easy for the workers to identify her, and sets a good example to the women workers by demonstrating a dress suitable to the work to be done. In some industries, if the nurse's duties are confined to the plant or if she has time to change before and after going out, a regulation white uniform or the nurse's school uniform is practical. In mills, however, where there is moving machinery and where the nurse may have to go out of doors to reach different parts of the plant, spreading caps and flying skirts and aprons may be a danger and are better kept for the first aid room. A nurse going among moving machinery may soon find it one of her duties to impress upon women and girls the necessity of closely fitting uniforms, smoothly dressed hair and closely fitting caps, and she should set them an example by making her own uniform fit the work she is doing.

A busy nurse working both in the plant and visiting in the homes and perhaps driving and sometimes repairing an automobile, cannot keep a white uniform in a presentable condition and she cannot find the time for the many changes necessary if it is kept for indoor use. Furthermore, workers sometimes object to having a nurse in uniform call, when, if she is inconspicuously dressed, they will welcome her. This may be a benighted view but is pardonable in towns where the visiting nurses have the name of being charity workers.

A standardized dress, coat and hat characteristic of the individual industrial nurse or nurses of the plant but not recog-

nizable as specially belonging to visiting nursing solves the problem for many nurses in industry. The dress should be washable, with white collar and cuffs and the coat and simple hat of the same color as the dress. The nurse will then be able to wear her uniform to and from her home and be suitably and inconspicuously dressed in the plant, on the street and in the homes of the workers. Care will be needed in choosing the material for the dress. It must not specially suggest nursing. Nurses in mills have found gray linen of a mixed weave satisfactory. Grey Japanese crepe and gray cotton poplin have been used, and in department stores dark blue washable silk has been worn. A standard material is best because, once a suitable dress is planned, it is better not to change it.

When the growth of the work makes an assistant nurse necessary the employer should be willing to allow the senior nurse to have a voice in choosing the person with whom she will have to work and with whom she may be obliged to live. The senior nurse should at least have an interview alone with the candidate before she is engaged, and the work will gain much if she is allowed to find and engage her with the approval of her employer. It is sometimes thought that such a position should be given to some young woman who has grown up in the community. While such a person has the advantage of knowing the people and the geography of the town, and of having relatives and friends at hand, it is the exception, in a *small* town, to find a nurse, no matter how fine and desirable she may be, who can enter the homes of people among whom she has grown up and gain their confidence and appreciation with the same readiness as some one unfamiliar with the history of those whom she visits.

The assistant, having been chosen, deserves the best that her senior can give her in opportunities for present service and in preparation for wider usefulness. She should have an opportunity to learn all that the senior has learned and she will learn more readily by taking advantage of her senior's experience.

She should be free to make suggestions for the betterment of the work and the employer should know when improvement has been made possible by her efforts. A little statement of the work of the assistant nurse may be gracefully included in the regular nonstatistical reports.¹

For her part the assistant nurse owes absolute loyalty and coöperation to her senior and should keep her informed of all she does or learns which may affect their work in any way.

With the present shortage of public health nurses, an assistant industrial nurse should consider that she is serving an apprenticeship and should take every opportunity to increase her knowledge and develop her powers so that she may be able to take advantage of the many opportunities for independent work. The senior nurse should make it her business to see that the junior has such opportunities as soon as she is able to assume the responsibility. The inconvenience of teaching a new assistant should be repaid in the satisfaction of having helped to equip another industrial nurse.

If there are two or more industrial nurses, the work will necessarily be planned by the one in charge, who will find a division of inside and outside work advisable. By this means both nurses understand all that is being done and each will be able to do the work of the other or to instruct a new nurse in case of sudden and unavoidable changes. No executive is really efficient who has no understudy. However capable she may be and however well she may personally manage her department, the real test of efficiency comes on the day she is suddenly forced to remain away from the plant. The real executive is the one whose department will, in her absence, continue to run smoothly and which will automatically absorb a new worker with little friction or inconvenience. This means, in a large nursing department, a head nurse who is in charge of all other nurses and of the nursing and all allied activities.

The plan of having several nurses with distinct duties and no supervising nurse is wasteful of time, prevents the

¹ See Chapter X, Records and Reports.

possibility of giving experience to young nurses, destroys unity of plans, purpose and results, and makes unexpected changes of personnel times of confusion and friction with the resulting chance of workers being neglected. Much, that has been so carefully built up, may also at these times be destroyed through the ignorance or inexperience of those suddenly compelled to assume unaccustomed responsibilities.

Large corporations, with branch plants in several localities, sometimes employ a supervising nurse whose responsibility is the management of nursing service for all plants. This is necessarily almost purely executive work, although the organization of the service in each plant will require the presence and active assistance at the beginning of the supervising nurse. Employment of this sort offers many opportunities in setting a high standard for industrial nursing and in working out practical uniform methods. The service may be so planned as to be practically unaffected by changes of personnel. The comparative records and reports of such a supervising nurse may be made of more value than those of isolated nurses working alone. The visits of a supervising nurse may mean much to the nurses in outlying plants by keeping them in touch with what others are doing, giving them the benefit of the viewpoint of a more experienced woman and by the real help of the supervisor in the solution of their problems.

CHAPTER XV

WHAT INDUSTRIAL NURSING OFFERS TO THE NURSE

No one will question the statement that the nurse can give much to industry. Let us see what the world of industry offers to the nurse. She should expect something in the way of special advantages, personal development, health, happiness and financial reward and preparation for future opportunities.

The continual contact with people of all sorts, most of whom are not ill, gives the nurse who can see through the eyes of others, a wide view point. The fact that so large a number of those she sees have normal minds and bodies causes her to react to people in a clearer headed and more normal way than is possible for a nurse, surrounded during her working hours solely by the sick and those concerned with them. To the nurse more interested in health than in abnormalities, this is an advantage to be prized not only for its effect on herself but for what it enables her to bring to the sick.

Work in the business world is valuable training for a nurse. It teaches her method and exactness. It tempers her impulses and develops her sense of justice and of relative values. It teaches her the fundamental likeness of all people while training her to recognize their individual characteristics and to treat them as persons rather than cases.

It is healthy work, physically as well as mentally, unless the nurse falls into the temptation of trying to do more than she is physically able to stand.¹ If she yields to this temptation she will soon find herself unable to do anything. While in some industries the hours are still long, they are usually regular; there should be no night work; and Saturday after-

¹ See Miss Mary S. Gardner's "Public Health Nursing," page 157.

noon, Sunday and holidays are usually free. Where home visiting is done there is the advantage of some time spent out of doors. Much walking from patient to patient is so wasteful of time that many employers provide an automobile which the nurse drives. This is a means of rest and pleasure to the nurse unless the traffic conditions of a city make it a source of additional nervous strain. But even in a city a car does so much to save time, exposure and fatigue to every industrial nurse who works in or visits the homes, that it must be considered almost a necessity. In large cities home visiting may mean many stairs to climb; small towns with detached houses are free from this drawback.

Industrial nursing, while not free from discouraging features, is on the whole happy work, in which conditions improve and results are obtained, and in which service is repaid by confidence and often affection.

Any statement as to the financial returns from industrial nursing made at the present time (1919) may have little bearing on the future. Exact information is not easy to obtain as many salaries are considered by the employer as confidential. It seems safe, however, to say that the salary of an assistant nurse may be expected to exceed somewhat that of a staff nurse of a visiting nurse association. The salary of a nurse organizing industrial nursing or holding an important executive position will depend largely on her ability to earn her money. In the business world *proved* ability is generally recognized. Living expenses are seldom included, although living quarters are sometimes provided. Uniforms are, as a rule, not provided. Uniforms are sometimes laundered and when the nurse must change after reaching the plant this service is a great convenience to her. But if this involves discussion it is more dignified for the nurse to be as independent in this as in other personal matters. Vacations with pay are usually allowed and the salary is almost always continued during short illnesses. An industrial nurse must usually make provision for her own hospital care if she should need it.

No nurse joining the ranks of industry at the present time

(1919) need feel that she is entering a crowded field. Because there are not enough industrial nurses, untrained and half-trained women are attempting highly technical and responsible work. Industrial nursing is not a "blind alley occupation." Opportunities abound. A nurse building on a thorough preparation with an open-minded attitude toward her work should not fail to advance as far in industrial nursing as in any other branch of the nursing profession.

With the realization of more ideal social and industrial relations the industrial nurse of executive ability will, without doubt, find her services in greater demand under health insurance laws and in organizations and industries where full understanding and coöperation between employer and employé give each an equal voice in the pursuit of their common aims.

While the industrial nurse, with others, will gain strength and inspiration by membership and active participation in the various nursing, public health, social welfare and safety organizations, state, local and national, she must also realize that her special work gives her an exceptional and valuable experience, and she should be willing to share this with other nurses who have not the same opportunities. Pupil nurses should be given an idea of the opportunities awaiting them in the industrial field. Other public health nurses need the knowledge the industrial nurse gains so easily of the normal condition of the people she deals with, their racial peculiarities and the relation of environment and employment to health. The industrial nurse should give as generously of her experience and allow as much of her work to be seen by those interested as is permitted by her employer. She owes a duty to her training school, to her alumnae association, to the National Organization for Public Health Nursing; she can only discharge this duty by taking an active part in meetings, serving on committees and doing whatever else lies in her power to further the broader cause of public health nursing.

APPENDIX

FIRST AID RULES

If the industrial nurse needs a guide for first aid, the following "Instructions to Laymen for First Aid Treatment of Common Injuries and Disorders," copyright 1914 by Conference Board on Safety and Sanitation, are excellent. They are included by special permission of Mr. Mangus W. Alexander, Managing Director, National Industrial Conference Board.

SAFETY BULLETIN NO 17, NATIONAL FOUNDER'S ASSOCIATION

WOUNDS THAT BLEED

Abrasions, Cuts, Punctures

Drop 3% Alcoholic Iodine into wound freely, then apply dry sterile gauze to wound and bandage it. Do not otherwise cleanse wound.

Severe Bleeding

Place patient at rest and elevate injured part. Apply sterile gauze pad large enough to allow pressure *upon, above and below* wound. Bandage *tightly*.

If severe bleeding continues apply tourniquet *between* wound and heart and secure doctor's services at once. Use tourniquet with caution and only after other means have failed to stop bleeding.

Nose Bleeding

Maintain patient in upright position with arms elevated. Have him breathe gently through mouth and not blow nose. If bleeding continues freely press finger firmly on patient's upper lip close to nose or have him snuff diluted White Wine Vinegar into nose.

INJURIES WHICH DO NOT BLEED*Bruises and Sprains*

Cover injury with several layers of sterile gauze or cotton, then bandage tightly. Application of heat or cold may help, other means are unnecessary. If injury is severe place patient at rest and elevate injured part until doctor's services are secured.

EYE INJURIES*Except Eye Burns*

For ordinary eye irritations flood eye with 4% Boric Acid Solution. Remove only loose particles which can be brushed off gently with absorbent cotton wrapped around end of toothpick or match.

Do not remove foreign bodies stuck in the eye. In that case and for other eye injuries drop Castor Oil freely into eye, apply sterile gauze, bandage loosely and send patient to doctor.

SPLINTERS OR SLIVERS EMBEDDED IN SKIN*Except in Eyes*

If easily reached withdraw with tweezers, then treat same as "Wounds that Bleed"; otherwise let doctor attend to it.

FIRE BURNS, ELECTRICAL BURNS AND SUNBURN

Do not open blisters. Use Burn Ointment (3% Bicarbonate of Soda in Petrolatum) freely on sterile gauze applied directly to burn. Cover with several thicknesses of flannel or other soft material, then bandage *but not* tightly.

ACID BURNS

Thoroughly flush wound with water, then dry wound, apply Burn Ointment and bandage as above.

ALKALINE BURNS

Thoroughly flush wound with water, then flood with White Wine Vinegar to neutralize (dilute vinegar for alkaline *eye* burns), dry wound, apply Burn Ointment and bandage as above.

EYE BURNS

Treat in the same manner as other burns.

DISLOCATIONS

In case of dislocation of finger except second joint of thumb, grasp finger firmly and pull it gently to replace joint, then place finger in splint and bandage it. In all other cases place dislocated part at rest and promptly secure doctor's services.

FRACTURES

Make patient comfortable and secure doctor's services at once. Avoid unnecessary handling to prevent sharp edges of broken bones tearing artery. If patient must be moved place broken limb in as comfortable position as possible and secure it by splint.

In case of severe bleeding apply sterile gauze and follow directions under "Severe Bleeding."

DIZZINESS, HEADACHE, NAUSEA

Give patient teaspoonful of Aromatic Spirit of Ammonia in hot or cold water.

CHILLS AND CRAMPS

Give patient 20 to 30 drops of Jamaica Ginger in hot or cold water. If improvement is not speedily obtained send for doctor.

FROST BITES

Rub with ice, snow or cold water, then treat as "Fire Burns."

INSECT BITES

Treat as "Wounds that Bleed."

INTERNAL POISONING

Immediately secure doctor's services. Make patient drink large quantities of water, preferably warm, and make him vomit by sticking one's finger down his throat or by other means.

HEAT PROSTRATION

Give patient teaspoonful of Aromatic Spirit of Ammonia in hot or cold water. In case body feels warm apply cold to it; if necessary

give cold bath. In case body feels cold and clammy, apply heat to it and immediately send for doctor.

UNCONSCIOUSNESS FROM FAINTING

Lay patient on his belly and turn his face to one side. Loosen all tight clothing. Remove false teeth, tobacco, etc., from mouth. Apply cold to head, warmth to hands and feet. If breathing stops, treat patient as directed under "Electric Shock." Give no liquids by mouth until patient is fully conscious. Then give teaspoonful of Aromatic Spirit of Ammonia in hot or cold water.

SHOCK, FOLLOWING INJURY

In case shock is due to severe bleeding control it first as directed, under "Severe Bleeding" and summon a doctor.

Lay patient flat on back and keep him warm with blankets, hot-water bottles, etc., and provide plenty of fresh air. Let patient inhale fumes of Aromatic Spirit of Ammonia. If fully conscious, give patient hot drink or teaspoonful of Aromatic Spirit of Ammonia in hot or cold water.

UNCONSCIOUSNESS FROM ASPHYXIATION BY GAS, SMOKE OR WATER

Treat patient as directed under "Electric Shock."

ELECTRIC SHOCK

Immediately free patient from electrical circuit using every care to protect one's self against electric shock. Then if patient is unconscious, even if he appears dead, lay him on his belly with arms extended forward, turn his face to one side, remove false teeth, tobacco, etc., from his mouth and draw his tongue forward.

Kneel, straddling patient's thighs, facing his head, and resting your hands on his lowest ribs. Swing forward and *gradually* bring weight of your body upon your hands and thus upon patient's back, then immediately remove pressure by swinging backward. Repeat this movement about twelve times per minute without interruption for hours if necessary, until natural breathing has been started and maintained (see cuts).

Meanwhile send for a doctor, have patient's tight clothing loosened, keep him warm and provide plenty of fresh air. Do not give patient liquids by mouth until he is fully conscious.

**FIG. 1—INSPIRATION:
PRESSURE OFF**



**FIG. 2—EXPIRATION:
PRESSURE ON**

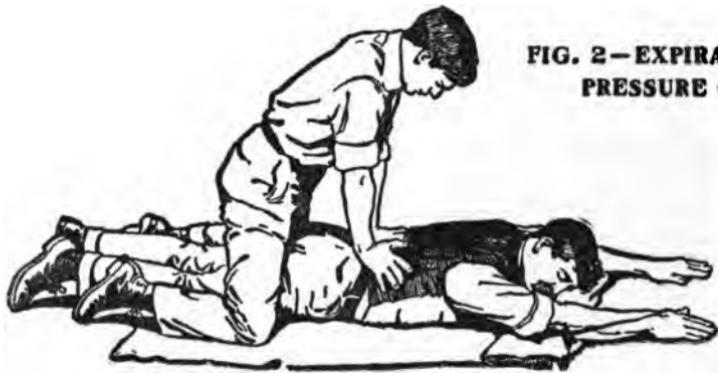
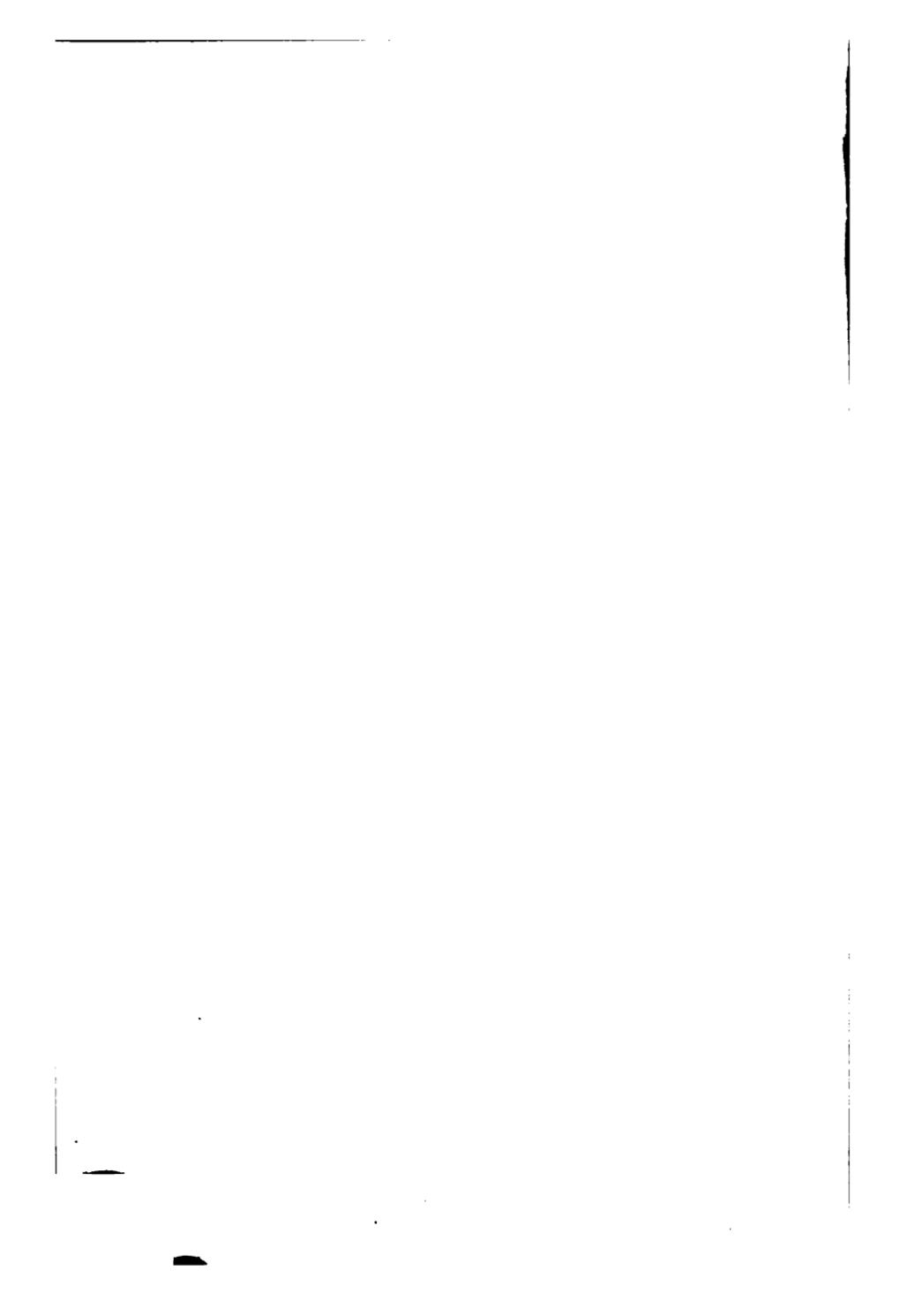


Plate D



SOURCES OF INFORMATION

ON MANY PUBLIC HEALTH AND SOCIAL PROBLEMS ENCOUNTERED BY THE INDUSTRIAL NURSE

American Social Hygiene Association, 105 W. 40th St., N. Y. C.

Object: For the repression of prostitution, the reduction of venereal disease, and the promotion of sound sex education. Information and catalogue of pamphlets upon request. Associate membership, \$2.00, annual, \$5.00, sustaining, \$10.00. Memberships include quarterly magazine and monthly bulletin.

American Society for the Control of Cancer, 25 W. 45th St., N. Y. C., Miss Marion H. Mapelsden, acting executive secretary.

Object: To disseminate knowledge concerning symptoms, diagnosis, treatment and prevention. Publications free on request. Annual membership dues, \$3.00.

National Child Labor Committee, 105 E. 22nd St., N. Y. C., Owen R. Lovejoy, Secretary (35 State Branches).

Industrial and agricultural investigations; legislation; studies of administration education; delinquency; health; recreation. children's codes. Published quarterly "Child Labor Bulletin." Photographs, slides and exhibits.

National Child Welfare Association, 70 Fifth Ave., N. Y. C., Chas. F. Powlison, General Secretary.

Originates and publishes exhibit material which visualizes conditions affecting the health and education of children. Co-operates with communities, educators and organizations through exhibits, child welfare campaigns, etc.

National Committee for Mental Hygiene, 50 Union Square, N. Y. C., Clifford W. Beers, Secretary.

Pamphlets on mental hygiene, mental disorders, feeble-mindedness, epilepsy, inebriety, criminology, war neuroses and re-education, social service, backward children, surveys, state societies. Mental Hygiene, quarterly, \$2.00 a year.

National Committee for Prevention of Blindness, 130 E. 22nd St., N. Y. C., Edward M. Van Cleve, Managing Director, Gordon L. Berry, Field Secretary, Mrs. Winifred Hathaway, Secretary.

Objects: To furnish information, exhibits, lantern slides, lectures, publish literature of movement, sample free, quantities at cost. Includes N. Y. State Committee.

National Conference of Social Work, Julia C. Lathrop, President, Washington, D. C., Wm. T. Cross, General Secretary, 315 Plymouth Court, Chicago, Ill.

General organization to discuss principles of humanitarian effort and increase efficiency of agencies. Publishes proceedings annual meetings. Monthly bulletin, pamphlets, etc. Information bureau. Membership, \$3.00.

Children, Henry W. Thurston.

Delinquents and Correction, Cyrus B. Adams.

Health, Dr. C. E. A. Winslow.

Public Agencies and institutions, Albert S. Johnstone.

The Family, Joanna C. Colcord.

Industrial and economic problems, Mrs. Florence Kelley.

The local community, Frances Ingram.

Mental Hygiene, Maj. Frankwood E. Williams, M. O. R. C.

Organization of social forces, William J. Morton.

Uniting native and foreign born in America, Graham Taylor.

National Organization for Public Health Nursing, 156 Fifth Ave., N. Y. C., Ella Phillips Crandall, Executive Secretary.

Object: To stimulate the extension of public health nursing; to develop standards of technique; to maintain a central bureau of information. Official organ, The Public Health Nurse; subscription included in membership. Dues, \$2.00 and upward.

Playground & Recreation Association, 1 Madison Ave., N. Y. C.,
H. S. Braucher, Secretary.

Playground and community center activities and administration.

Red Cross Institute for Crippled & Disabled Men, 311 Fourth Ave.,
N. Y. C., Douglas McMurtrie, Director.

Maintains industrial training classes and an employment bureau for crippled men. Conducts research in reeducation for disabled soldiers and industrial cripples. Publishes reports and reconstruction work here and abroad, and endeavors to establish an enlightened public attitude towards the physically handicapped.

Russell Sage Foundation, For the Improvement of Living Conditions, 130 E. 22nd St., N. Y. C., John M. Glenn, Director.

Departments: Charity Organization, Child Helping Education, Statistics, Recreation, Remedial Loans, Surveys, and Exhibits, Industrial Studies, Library, Southern Highland Division.

State & Municipal Departments of Health, and State Labor Departments.

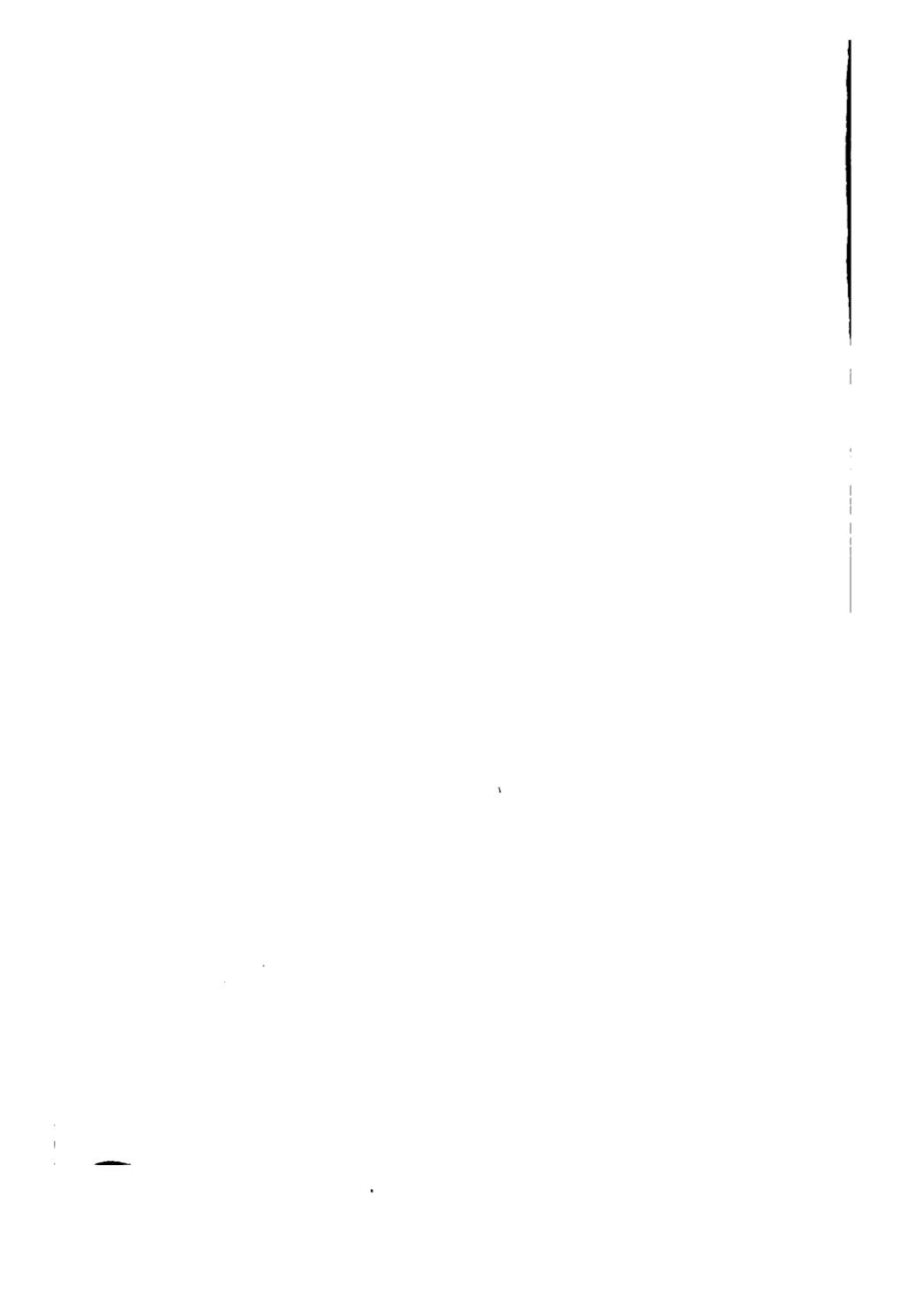
U. S. Dept. of Labor, Industrial conditions, hazards, disease, labor laws, Washington, D. C.

U. S. Dept. of Labor, Children's Bureau, Maternal and child welfare and laws regulating the same, Washington, D. C.

U. S. Public Health Service, Washington, D. C.

Young Women's Christian Association, National, 600 Lexington Ave., N. Y. C.

To advance physical, social, intellectual, moral and spiritual interests of young women. Student, city, town, and county centers; physical education, camps, rest rooms, lunch rooms, and cafeterias; educational classes; employment, Bible study; secretarial training school; foreign work; war work councils.



BIBLIOGRAPHY

GENERAL

Alexander, M. W.: *Hiring and Firing*, N. Y., Nat'l Asn. of Mfrs., 1915.

Antin, Mary: *The Promised Land*, N. Y., Houghton, 1912.

Balch, E. G.: *Our Slavic Fellow Citizen*, N. Y., Charities Pub. Comm., 1910.

Bergey, D. H.: *Principles of Hygiene*, 5th ed., revised, Phila., Saunders, 1914.

Brainard, Annie M.: *Organization and Administration of Public Health Nursing*, Macmillan, 1919.

Broadhurst, Jean: *Home and Community Hygiene*, Phila., Lippincott, 1918.

Byington, M. F.: *The Homestead*, N. Y., Charities Pub. Comm., 1910.

Cabot, R. C.: *Social Service and the Art of Healing*, N. Y., Moffat, 1909.

Cadbury, Edward: *Experiments in Industrial Organization*, N. Y., Longmans, 1913.

Connor, Ralph: *The Foreigner*, N. Y., Doran, 1909, also N. Y., Grosset, 1911.

Devine, E. T.: *Misery and its Causes*, N. Y., Macmillan, 1909, also N. Y., Macmillan, 1913.

Devine, E. T.: *Principles of Relief*, N. Y., Macmillan, 1904.

Dickinson, S. C.: *What to Do with the Other Eight Hours*, Arizona State Bureau Mines, Bulletin 68, Welfare Series 1, 1917.

Drury, H. B.: *Scientific Management: a History and a Criticism*, N. Y., Longmans, 1915.

Dunton, W. R.: *Reconstruction Therapy*, N. Y., Macmillan, 1919.

Fisher, Boyd: *Industrial Loyalty, its Value, its Creation, its Preservation*, London, Eng., Rutledge, 1918.

Fisher, Irving: *Bulletin 90 of the Committee of One Hundred on National Vitality, its Waste and Conservation*, Govt. Printing Office, Washington, D. C., 1910.

Gardner, M. S.: *Public Health Nursing*, N. Y., Macmillan, 1916.

Hayden, George and Alice: *Throw Physic to the Dogs*, N. Y., Doran, 1918. (Useful handbook on the avoidance and cure of constipation.)

Hayhurst, E. A.: *Survey of Industrial Health, Hazards and Occupational Diseases in Ohio*, 10 pages, Columbus, Ohio, State Bd. of Health, 1914.

Kelley, Florence: *Modern Industry*, N. Y., Longmans, 1914.

Kelly, R. W.: *Hiring the Worker*, N. Y., Industrial Management Co.

Kober, G. M., and Hanson, W. C.: *Diseases of Occupation and Vocational Hygiene*, Phila., Blackiston, 1916. (Valuable reference book for the industrial nurse.)

Ogden, H. N.: *Rural Hygiene*, N. Y., Macmillan, 1911.

Price, G. M.: *Modern Factory*, N. Y., J. Wiley & Sons, 1914.

Pyle, W. L.: *Manual of Personal Hygiene*, 7th ed., revised, Phila., Saunders, 1917.

Richards, E. H.: *Cost of Cleanliness*, N. Y., Wiley, 1908.

Rosenau, M. J.: *Preventive Medicine and Hygiene*, 3rd ed., N. Y., Appleton, 1917.

Spooner, H. T.: *Industrial Fatigue in its Relation to Maximum Output*, London, Author, 1917.

Steiner, E. A.: *On the Trail of the Immigrant*, N. Y., Revell, 1906.

Stelzle, Charles: *Letters from a Working Man, by an American Mechanic*, N. Y., Revell, 1908.

Tolman, W. H., Guthrie, A. W.: *Hygiene for the Worker*, N. Y., American Book Co., 1912.

U. S. Dept. of Labor: *Employers' Welfare Work*: Bulletins, 1, 2, 3, Washington, D. C.

U. S. Dept. of Labor: *Proceedings of the Employment Managers' Conference*, Bulletin 227, Washington, D. C., Phila., April 2, 3, 1917.

U. S. Dept. of Labor: *Welfare Work in British Munition Factories*, Bulletin 222, Washington, D. C.

Veiller, L. T.: *Housing Problem*, Phila., American Academy of Science, 1905.

Wald, L. D.: *House on Henry Street*, N. Y., Holt, 1915.

Watkins, G. P.: *Welfare as an Economic Quantity*, N. Y., Houghton, 1915.

Winslow, C. E. A.: *Health of the Worker*, N. Y., Metropolitan Life Insur. Co., 1913.

CHILD HYGIENE

Dickinson, M. B.: *Children Well and Happy*. Published under auspices of Mass. State Fed. Women's Clubs. Manual for the Use of the Girls' Health League of Mass. Boston, Le Roy Phillips, 1918.

Duke, Emma: *Infant Mortality: Results of a Field Study in Johnstown, Pa.*, U. S. Dept. of Labor, Children's Bureau, No. 9, 1915.

Duke, Emma Duncan, B. S.: *Infant Mortality: Results of a Field Study in Manchester, N. H.*, U. S. Dept. of Labor, Children's Bureau, No. 20, 1917.

Duke, Emma Duncan, B. S.: *Infant Mortality, Montclair, N. J., Study of Infant Mortality in a Suburban Community*, U. S. Dept. of Labor, Children's Bureau, No. 11, 1915.

Griffiths, J. P. C.: *The Care of the Baby*, 6th ed. revised, Phila., Saunders, 1915.

Kelley, H. W., Bradshaw, M. C.: *Handbook for School Nurses*, N. Y., Macmillan, 1918.

Levy, Julius: *Maternal Nursing considered from its Evolutionary and Biological Aspects*, American Medicine, New Series, Vol. X, No. 9, pages 676-682, 1915, also Newark, N. J., Dept. of Health. N. Y. (state) Dept. of Health, Outline for organizing and directing "Little Mothers' Leagues," Albany.

New Zealand Society for Health of Women and Children, and Example of Methods of Baby-saving Work in Small Towns and Rural District, Children's Bureau Pub. No. 6.

Struthers, L. R.: *School Nurse*, N. Y., Putnam, 1917.

U. S. Dept. of Labor, Children's Bureau, *Breast Feeding, Care of the Mother*, Wash., D. C., 1918.

West, Mrs. Max: *Prenatal Care*, U. S. Dept. of Labor, Children's Bureau, Washington, D. C., Pub. No. 4.

West, Mrs. Max: *Infant Care*, U. S. Dept. of Labor, Children's Bureau, Washington, D. C., Pub. No. 8.

THE WORKER'S FOOD

(Prepared by Miss Katherine Fisher, Department of Household and Institution Administration, Teachers' College, Columbia University.)

U. S. Dept. of Labor: *Welfare Work in British Munition Factories*. Reprints can be purchased from Supt. of Documents, Government Printing Office. (Bulletin 22.)

U. S. Dept. of Labor: *Bulletin of the National Association of Corporation Schools*. December, 1917. 130 E. 15th Street, New York.

Whitney, Anice L.: *Lunch Rooms for Employees*. "Monthly Review," Bureau of Labor Statistics, U. S. Dept. of Labor, December, 1917.

Morton, Augustus P.: *Welfare Work for Civilian Employees of the United States*. "Monthly Review," Bureau of Labor Statistics, U. S. Dept. of Labor, August, 1918.

Crum, Fredk. S.: *Restaurant Facilities for Shipyard Workers*. Industrial Relations Division, U. S. Shipping Board, Emergency Fleet Corporation, Philadelphia, Pa.

General Electric Co.: *The Preparation of Foods for Factory Employees*, General Electric Company, Cleveland, Ohio.

Y. W. C. A.: *Handbook of the Association Cafeteria*, National Board of the Y. W. C. A.

Smedley, Emma: *School Lunch Room Management*.

Payser, E. R.: *A Quiet Factory Lunch Room*. Journal of Home Economics, Oct., 1911.

Lage, Katharine: *A Lunch Room for Working Girls in which Simple Instruction is given*, Journal of Home Economics, Nov., 1910.

Lage, Katharine: *Institutional Supplies*, Bureau of State and Municipal Research, Baltimore, Md.

Smedley, Emma: *Institution Recipes*.

Smith, Frances L.: *Recipes and Menus for Fifty*.

Smith, Frances L.: *More Recipes and Menus for Fifty*.

Nettleton, Bertha E.: *One Hundred Portion War Time Recipes*, Lippincott & Co., Philadelphia, Pa.

Kittredge, Mabel H.: *The Home and its Management*, Century Co.

Gibbs, Winifred S.: *The Minimum Cost of Living*, Macmillan.

Rose, Mary Swartz: *Feeding the Family*, Macmillan.

Gibbs, Winifred S.: *Lessons in the Proper Feeding of the Family*, Society for Improving the Condition of the Poor.

McCollum, E. O.: *The Newer Knowledge of Nutrition*, Macmillan.

Stern & Spitz: *Food for the Worker*.

Kinne & Cooley: *Foods and Household Management*, Macmillan.

Balderston, L. R.: *Housewifery*, Lippincott.

Lusk, Graham: *The Basis of Nutrition*, Yale University Press.

Stiles, P. G.: *An Adequate Dish*, Saunders.

INDUSTRIAL RECREATION

(Prepared by the Playground and Recreation Association
of America)

1 Madison Avenue, New York City

Application may be made direct to the Playground and Recreation Association for definite information about folk dances, plays, music, and entertainments suitable for industrial centers.

Boy Scouts of America. Literature on their activities and organization, may be obtained from Boy Scouts of America, Headquarters, 200 Fifth Avenue, N. Y. C.

Camp Fire Girl literature may be had by applying to Camp Fire Girls' Headquarters, 31 E. 17th Street, N. Y. C.

Girl Scouts of America. Literature on their activities may be had from Girl Scout Headquarters, 1 Madison Avenue, N. Y. C.

Pageants. Outline of a pageant for an industrial center where there is very little money for special costuming and where great numbers of men and women must be used, can be had from the Playground and Recreation Association of America, 1 Madison Avenue, New York City, free of charge. (Bulletin No. 1 of the Industrial Series.)

Chesley, A. M.: *Social Activities for Men and Boys*, N. Y., Assn. Press, 1910. (A book taking up the organization and management of boys' clubs; "hikes," athletics, programs for indoor track meets; suggestions for entertainments for all sorts of special occasions as well as for every day. A book that fills the need for every type of entertainment from the simplest to the most elaborate.)

Ferris, H. J.: *Girls' Clubs*, N. Y., Dutton, 1918 (illustrated). (A book containing information about everything connected with girls' clubs, their purpose, organization and maintenance. Recommended by the Girls' Work Department of the National Board of the Young Women's Christian Association as an invaluable help in organizing and managing clubs. Will be useful to anyone conducting girls clubs, or to anyone just starting a club. A practical working handbook.)

MacKay, C. D.: *Patriotic Drama in Your Town*, N. Y., Holt, 1918. (This book gives simple, inexpensive, easily produced material for 4th of July and Christmas that could be readily used in industrial centers.)

BIBLIOGRAPHY

Marot, Helen: *Creative Impulse in Industry*, N. Y., Dutton, 1918.
(A book which goes into the philosophical as well as the practical side of the need for the creative life in industry. "An effort to maintain factory efficiency without turning workers into dull machines.")

Weir, L. H.: *Vocational Recreation in Indiana*, N. Y. C. Playground and Recreation Assn. (Bulletin of the Extension Division of Indiana University. Gives a broad, practical view of the whole subject. Particularly useful for its chapters on social and educational activities, games, playgrounds, etc.).

Weller, C. F.: *Recreation in Industries*, N. Y. C. Playground and Recreation Assn. (Takes up recreation from many angles. Describes theaters, movies, the laying out of playgrounds, use of leisure. Gives prices of playground equipment. Very comprehensive.)

INDEX

Accidents, increase of reported, 32; industrial, 32, 33; four classes of, 38; minor, 33; prevention of, 10, 143

Advertising, *see* first aid, advertising of,

Advice, circulars of, 146; gratuitous medical, 4

Alcohol, *see* stimulants

Americanisation, *see* foreigners

Applicant, interview with, 103; observation physical condition of, 107; blank form for, 120

Application for employment, blank for, 109; copy of, 110

Asphyxiation, 39, 160-163

Babies, supervision of, 126; well, care of, 127; how to find, 128

Baby welfare work, *see* child

Bibliography, 169

Cancer, prevention of, 42

Care, prenatal, 29, 30

Card, wage, time, 115; average earnings, 116; history, 111; identification, 113; pass, 117

Cathartics, 41

Center, industrial nursing, 124; recreation at, 124; development of, 139; the house for, 140; as a community center, 29

Charity, 30; lunch room not a, 143

Charity worker, nurse not a, 15

Check, specimen meal, 145, 146

Child welfare, 29, 30, 126-139

Civic association, 30

Class, mother's, 128

Classes, cooking, 147

Clerk, first aid record, duties of, 53, 68

Clinic, baby, 127

Clubs, little mothers', 139; organizing, ability in, 11; woman's, 30

Colds, 44

Co-operation, 8, 10, 73; with health department, 28, 44; with employment department, 37; with local hospital, 42; with employer, 29; with industrial physician, 23; with physicians, 22, with workers, 26

Community, the industrial nurse and the, 28-31

Community, resources of the, 28

Committees, management of industrial nursing by, 19, 20; management of lunch room by, 144; material relief by, 19

Compensation, industrial, 5; claims for, 32; settlement of, 32, 38; the industrial nurse as witness in, 49, for industrial disease, 21

Conference, baby, 126; helpful, 19

Contagion, control of, 44, 45; medical examination for pre-

vention of, 22; in industrial day nursery, 137; in the employees' lunch room, 143

Day book, 86; sample page, 87; duplicate pages for, 98; for each station, 59

Dentist, the, 43; relation of, to workers, 43

Department, employment, function of, 101

Detective, the industrial nurse not a, 16, 17

Diet, *see* food

Dietetics, in the homes, 147; nurse's knowledge of, 148

Dietitian, 19; necessary in lunch room, 143; the industrial nurse as, 143

Directory, of plant, 28; of community, 28

Disease, industrial, 12, 79

Dispensary, evening, 29; works, 29

Doctor, *see* physician

Dress, uniform, advantages of, 152, 157; suggestions for, 153

Dressings, plan for handling, 85; supplies for, 61; surgical, 61, 62

Drowning, 39, 40, 160-163

Drugs, *see* medicines

Emergencies, 39, 40

Employees, dismissal of, 105; new, 37; interview with, 121; requisition for, 144

Employer, the charitable, 2

Employment department, *see* department, employment management, *see* management, employment

Epidemics, 44

Ethics, nursing, 78

Etiquette, professional, 23, 24

Examination, of employees, medical, 22, 79; of lunch room employees, 143; on return from illness, 79; value of nurse in, 23

Eyes, examination of, 42, 120; strain of, 43

First aid, equipment, 56-64; instruction of workers in, 49; inspection of, 64; plan for, 51, 52, 53, 54; rules, 38, 39, 40; outfits for laymen, 34; room, 7, 26, 27, 32; location of, 51; rules for, 159; station, 64; advertising of, 34-37

Food, 41, 142, 143; in work rooms, danger of, 142; for injured worker, 59; habits, racial, 147

Foreigners; Americanization of, help of industrial nurse in, 4, 71, 72, 149

Foremen, co-operation with, 35, 44, 79

Funds, benefit, 4; employers' objections to, 5; loan, 15; pension, 6; sick, 4, 5

Garden, back yard, 29; nurse's, 29

Gossip, value of, 36, 48

Habits, regular, 41; of worker, 43

Handicapped, 22; advantages of, 101; adjustment of work to, 102

Headaches, 41

Hemorrhage, 39, 40

History, industrial nursing, 1-8

Home visiting, necessity of, 70

Hospital, industrial, 1, 21; company, 124

House, nurse's, 124; objections to, 125
Hygiene, personal instruction in, 48
Hysteria, 42
Illness, prevention of, 10, 42, 143
Industrial nurse, *see* trained nurse
Infant welfare, *see* child
Infections, 32, 34, 35, 37.
Labor, disturbances, 27; turnover, 5, 99
Laundry, bag, 63; of uniforms, 157; work, 63
Laws, industrial, relation of nurse to, 49
Library, circulating, 126; professional, 66
Linen, first aid room, 63
Loan closet, 126
Loyalty, to employer, 27; to senior, 154
Lunch room, 142; not a charity, 143, 144; policy of company, 144
Malingering, 3; duty of nurse in case of, 17
Management employment, for nurses, 99; duties of nurse in, 104
Maternity, benefits, 6; out of wedlock, 46
Medicines, giving of, 33, 41; promiscuous administration of, 43; list of, for first aid room, 60
Meetings, for conference, 19, 20; informal, 85
Noon hour, 47, 48, 79
Nuisances, industrial, abatement of, 28
Nurse, *see* trained nurse in industry
Nurse, industrial, supervising, 155
Nursery, industrial, day, 133
Nursing, industrial, beginning of, 33; cost of, 4, 67, 68; development of, 4, 7; growth of, 7, 8; advantages to the nurse of, 156; school, 30; payment for, 16
Orders, first aid, standing, 26, 33, 39; visiting nursing, 76; written, 98
Patients, first aid, four classes of, 38; return of, for redressings, 82
Periodical, published by employés, 119, 140; expenses of, from proceeds of lunch room, 144
Personnel, 68
Physician, family, 22, 25, 41, 44, 45, 78, 79; and baby conference, 127; and sick baby, 130; habit of employing, 130; supervision of pregnant women by, 131, 132; private, 22, 25, 41, 45, 77; attending, 43, 76; industrial, 18-44, 54, 61, 64, 77; financial arrangements with, 24; part time, 23, 25; organization rests with, 89; and baby clinic, 127; in employment office, 100; relation of industrial nurse to, 150
Record card, industrial, 93; combination employment and nursing, 112
Record keeping, coöperation in, 92
Record keeping, plan for, 93
Records of industrial nurse, 21, 35, 38, 41, 46, 49; classification